

"THE PROJECTING SPIRIT"  
SOCIAL, ECONOMIC AND CULTURAL CHANGE IN  
POST-REVOLUTIONARY NORTHERN VIRGINIA, 1780-1860

By

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL  
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1967

## ACKNOWLEDGEMENTS

I have accumulated many debts in the course of completing this project. In Richmond the staff of the Library of Virginia provided access to numerous manuscript collections and shared with me their knowledge of the library's holdings. The staff at the Virginia Historical Society filled my every request and provided a congenial environment within which to work. The Society also provided much needed financial aid. The staff at the Alderman Library at the University of Virginia in Charlottesville also aided my research greatly. I am thankful to all these institutions. As my notes reveal, I am deeply indebted to the work of T. Michael Miller, the historian at Lloyd House in Alexandria. His indefatigable research in southern Virginia's local history aided my own work extensively. Thanks also to the Interlibrary Loan Office at the University of Florida who made completing this project in Gainesville possible.

Financial aid was provided by the History Department at the University of Florida. I also received fellowships from the College of Liberal Arts and Sciences and the Graduate School, which provided a welcome break from the grind of assistant teaching. In addition, the Social Sciences and Humanities Research Council of Canada provided generous financial

support in the form of a three-year doctoral fellowship for which I am extremely grateful.

My intellectual debts are still greater. Professors William O. Eversman and William E. Nelson at the University of Toronto first piqued my interest in American history. For better or worse, I would not be writing these words without them. At the University of Florida the Department of History has provided a rich intellectual environment and the influence of many people has made me a better historian. My thanks in particular to Thomas Gallant, C. John Sommerville, and David Colburn whose classes challenged, annoyed and excited me. Though he will probably conclude that my work is "deeply flawed," Jeffrey Adler has consistently demanded more of me. I thank him for his rigorous and creative contributions to my education, both as scholar and teacher. Ronald Formisano read the entire dissertation with care and a critical mind. I have benefited greatly from his comments and suggestions. I am also deeply grateful for the friendship and support of my fellow graduate students, in particular Christopher Olsen, Mark Greenberg, Ross Evans, Ben Kilbride and Andy Chassey. One could not ask for better friends, colleagues (or poker partners). In addition, Stephen G. Meyer, though trapped in the poor, darkest Alabama, has long provided a much-needed counterpoint to my own intellectual and political flights of fancy. And, as Yia would say, "the snack was good."

My greatest intellectual debts, however, are to Everett Ruessell and Beatrice Wynter-Brown. Though he did not live to see this project completed, every page bears Beatrice Ruessell's imprint. He saw the early chapters through numerous drafts and always knew when I needed words of support and encouragement or (more often) a swift kick in the rear. More important, he challenged me to write history up to his own high standards and enabled me to love the intellectual challenges of the discipline. His untimely death has left us all poorer. To Beatrice Wynter-Brown I am equally indebted. He happily stepped into Everett Ruessell's role and has seen this project to its completion. His very different intellectual perspective has constantly challenged me and made my work, I believe, much stronger. I am also grateful for his encouragement and financial aid throughout the project.

Finally, my family has provided endless support and assistance. Though for many my brother Kevin and sister Ariana were only a phone call away with words of encouragement and news of home—keep those newspapers coming! My parents, Albert and Mabel Outhouse, have always been there for me emotionally and financially. They have helped keep my spirits high, provided me to finish, and helped see this project to the end. And my father will be pleased to know that at some point, school days actually end. Finally, and above all to my wife, Minnette. She has followed me across a continent, endured countless separations, and

neverly completed. Indeed, she has been a constant source of support, encouragement and love. Without her care of this would have been possible

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Abstract of Dissertation Presented to the Graduate School  
of the University of Florida in Partial Fulfillment of the  
Requirements for the Degree of Doctor of Philosophy

**"THE PROJECTING SPIRIT"  
SOCIAL, ECONOMIC AND CULTURAL CHANGE IN  
POST-REVOLUTIONARY MODERN VIRGINIA, 1789-1865**

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December 1987

Chairman: Herbert Wyatt Brown  
Major Department: History

The American Revolution, historians contend, profoundly altered American society and culture. Yet the precise nature of that change remains disputed. My dissertation, a detailed social history of Virginia's Tidewater watershed after the Revolution, directly addresses this debate. I argue that the Revolution initiated an optimistic era of social change and economic improvement that profoundly altered the nature of revolutionary ideology and encouraged the formation of a commercial and liberal ethos that celebrated economic self-interest and individual rights. But in Virginia independence also ensured the perpetuation of slavery and the patriarchal values of the South. Thus, northern Virginians formulated an old hybrid, simultaneously embracing economic liberalism and traditional social values.

Responding to changes in worldwide demand, farmers and planters of Virginia's upper southern neck abandoned their traditional staple tobacco and began growing grain. This switch, in time, spurred broader economic changes. Transportation links were developed to bring the new staples from the backcountry to the port of Alexandria. Grain farming also spurred the development of new industries and significant urban growth. Equally notable, the merchants and farmers of northern Virginia vigorously campaigned for the creation of banks to fund economic development. Finally, the region's intellectuals actively contributed to technological innovation and agricultural improvement in the early republic.

In sum, in the wake of the Revolution northern Virginia stood at the forefront of economic and social modernization: a paradigm of commercial and entrepreneurial entrepreneurship. However, unlike the northern states in which slavery was gradually abandoned after the Revolution, northern Virginia's principal labor force remained African American slaves. Contemporary newspapers, almanacs, and personal correspondence attest to the fact that residents of the region celebrated an rise to commercial prominence; they also attest to the support of slavery and the patriarchal customs of the South. More important, contemporaries specifically linked regional economic and social developments to the resolution of American independence. Thus, I argue that it was at this moment that the positive nature of northern, middle-class culture-blended *and* slave - was constructed

## INTRODUCTION

The American Revolution remains an enigma. Though generations of historians have grappled with the problem of the Revolution's social meaning and consequences, it remains as contentious an issue today as it was in 1818 when J. Franklin Jameson addressed the question in *The American Revolution Considered as a Social Movement*. Jameson asked historians to study the Revolution as something more than a political or military event: to recognize that "the stream of revolution, once started, could not be confined within narrow banks, but spread abroad upon the land." This dissertation then, begins with the same, intractable question: "What were the social and ideological repercussions of the Revolution?" As a result, I have focused my attention on the twenty-five years after 1780 rather than the years of the Revolution itself as an effort to trace the changes in ideology and social and economic life.<sup>1</sup>

Of course, interpretations of the social consequences of the Revolution have changed greatly since Jameson wrote his book. In recent years, historians have argued that the Revolution gave rise to an expansive, commercial society which embraced democracy and economic liberalism. As Gordon Wood, the foremost proponent of the *Finian* series, "The Revolution,

more than any other single event" transformed America, making it "the most liberal, democratic, and modern nation in the world." More important, the Revolution also transformed the values of average Americans, making them "the most liberal, the most democratic, the most commercially minded, and the most modern people in the world." In short, the Revolution gave rise to a burgeoning commercial and democratic nation peopled by individuals who enthusiastically embraced the marketplace and sought vigorously to exploit the opportunities created by political independence, a bountiful land, and growing world markets. Even "neo-progressives" historians who argue that many or most Americans opposed the expansion of the market, concede nonetheless that the Revolution spawned a "bourgeois" moral order.<sup>1</sup>

Oddly, however, these recent studies ignore half the nation that the Revolution created. Historians have ably traced the social consequences of the Revolution in the North—especially the northern port cities—but they have paid relatively little attention to changes in the Southern states. When mentioned at all, the South is usually described as an "autonomous realm" that stood apart from the rest of American social and economic life because of the survival of slavery and the social and political authority of a "hazy," long-haired planter class. Indeed, Wood traces the origins of the Civil War to the differences engendered between the nations by the Revolution. In one stroke, 1861 becomes the defining moment of "the nation

antebellum South, with changing ideological, economic and social conditions and regional variations accumulated into the region's ultimate destiny. This ideology has led historians to assume that the South was "peculiar" from the birth of the American republic and that the section escaped most of the social consequences of the Revolution.<sup>7</sup>

My dissertation addresses this ideology directly by asking the question: Did the transformations which historians have found in the North after the Revolution—that is, the growth of individual freedoms and evidence of economic liberalism—occur in the South? Thus, I shift the focus of my study from the northern states and cities to the South. Believing, as anthropologist Clifford Geertz argues, that all knowledge is ultimately local,<sup>8</sup> I also decided that to delineate convincingly the extent of social and economic change I needed to examine a small area closely, to see how the Revolution altered people's daily lives. The five counties of northern Virginia—Fauquier, Loudoun, Berkeley, Jefferson, and Frederick—running from Alexandria west to the Shenandoah Valley along the north bank of the Potomac River, constituted an integrated economic, social and political unit small enough to study in some detail. Yet at the same time, the region was large enough to be affected by broader ideological and social changes that swept the United States in the early republic. The local press and the surviving literary sources provide a rich commentary on local, state and national events.

Moreover, the region dominated by large planters such as George Washington and George Mason, and home to many Virginia families such as the Lees and Carters who would in subsequent years scatter throughout the Deep South and the Southwest, appeared to epitomize many of the traditional traits historians have commonly associated with the Old South. Most notably in the twenty-five years following the Revolution, the slave population of the region remained constant at over 80 percent of the total population. There also patriarchy and patriarchy derived, as did the lower end of the Old South. It was in northern Virginia, after all, that Henry "Light Horse Harry" Lee father of the "ideal model" of Southern gentility Robert E. Lee made his home. In short, by locating my study in the South I raised a new and equally important question: Namely, what was the nature of the Southern slave society and economy? This second question became increasingly compelling because the details I discovered in northern Virginia did not accord with the dominant historical interpretation of the antebellum South.<sup>1</sup>

Instead, in the twenty-five years after the Revolution, northern Virginians displayed a liberal and entrepreneurial spirit similar to that of the northern states. The region's farmers and merchants believed they were uniquely situated to capitalize on the numerous opportunities afforded by independence. As a result, they undertook a series of projects designed to spur economic development and individual wealth. In Chapter Two

details. Farmers responded to changes in overseas demand by switching from tobacco to the cultivation of peanuts. Chapters Three and Four describe the attempts of merchants and farmers to close the region's rivers (most notably the Potomac) and build harbors in an effort to enlarge Alexandria's economic hinterland and expand local access to world markets. Chapter Five describes the surprising degree of urban growth and industrial development in northern Virginia. The shift to grains spurred the development of a series of "spin-off" industries—milling, bottling, brewing, etc.—which concentrated in a growing number of small urban centers inhabited by a rising population of residents. The region also saw the establishment of financial institutions (detailed in Chapter Six) to facilitate commercial transactions and economic investment. Finally, northern Virginia was at the forefront of technological innovation and agricultural improvement in the early republic. Chapter Seven recounts how northern Virginians actively participated in and contributed to the national search for stimulus technology and science. While agricultural reformers urged the region's farmers to adopt improved farming techniques, a number of local inventors, responding to the latest needs of the new nation and stimulated by their national training, contributed to the technological advancement of the early republic.

This dissertation, then, brings into focus the full complexity of Northern life—both its outward growth and its traditional, forlorn—and

draws the attention of historians to the social consequences of the Revolution in northern Virginia and more generally the South. What is most striking, finally, about northern Virginia after the Revolution and what historians have largely disregarded—was the outpouring and unknown spirit—in short, the ‘pioneering spirit’—which the region’s inhabitants displayed. Thus, the historians’ image of a ‘lazy South’ holds little explanatory power.<sup>1</sup> northern Virginians of the early republic simply do not fit the paradigm. Confronted to slavery and faced with the opportunities offered by independence, they forged a distinctive social and economic order in the wake of the Revolution.

### Notes

1 J. Franklin Jameson, *The American Revolution Considered as a Social Movement* (Princeton: Princeton University Press, 1964), 2.

2 Gordon Wood, *The Revolution and the Idea of Man* (New York: Alfred A. Knopf, 1969), 87; see also Joyce Appleby, *Capitalism and a New Social Order* (New York: New York University Press, 1984) and Louis Krieger, *Republicanism and American Federalism: Political Ideology in Late Eighteenth-Century England and America* (Ithaca: Cornell University Press, 1990). Allen Kalkoff, *The American Origins of American Capitalism* (Charlottesville: University Press of Virginia, 1984), 96–100, argues that the Revolution created a “bourgeois” society, but that this social transformation superseded “profound ideological differences” (147) between various social classes. For similar “neo progressive” views see the essays in, Alfred F. Young, ed., *The American Revolution: Explorations in the History of American Radicalism* (DeKalb: Northern Illinois University Press, 1979); and Young, ed., *Beyond the American Revolution: Explorations in the History of American Radicalism* (DeKalb: Northern Illinois University Press, 1993).

3 Kalkoff, *American Origins*, 112, 134 (quoting Wood, *Revolution and the Idea of Man*, 134–137, 267–273, 285–244; see also Douglas B.

Ryan, 'Markets Without Market Revolution: Southern Planters and Capitalism?' *Journal of the Early Republic* 18 (Summer 1999): 207-231.

4 Clifford Geertz, *Local Knowledge: Further Essays in Interpretive Anthropology* (New York: Basic Books, 1983).

5 Many works could be cited, but for the best statements of the dominant interpretation of the Old South see: Eugene Genovese, *The Political Economy of Slavery: Studies in the Economy and Society of the Slave South*, Second Edition (Middletown, CT: Wesleyan University Press, 1968 originally published 1963); Kenneth Fox Genovese, *Within the Plantation Household: Black and White Women of the Old South* (Chapel Hill: University of North Carolina Press, 1985); and Ericson West-Eberly, *Southern Honor: Ethics and Behavior in the Old South* (New York: Oxford University Press, 1998: 105 quote).

6 The term 'Gay South' comes from Larry Rovelson, *The Gay South* (New York: Oxford University Press, 1981).

## CHAPTER 1 THE SETTING: HISTORY AND HISTORIOGRAPHY

In 1785 Henry "Light Horse Harry" Lee, Revolutionary War hero and a member of Virginia's planter elite, purchased a five hundred acre tract at the Green Falls of the Potomac River. Lee promised to pay the seller, Bryan Fairfax, £4,000 for the parcel, and as part of the Fairfax proprietary lands on Virginia's northern neck, outstanding quarterly rents of £100 per year. At 28 per acre, Lee had paid a hefty price. He believed, however, that the land's value "infinitely exceeded[] that of any plot of ground in the U.S." Among its advantages was the fact that it lay "in the midst of an excellent populous country." Indeed, "the Br. Potomac country," Lee wrote, was "a region as delightful & as fertile as husbandry has ever given to man." Still, the tract offered a greater attraction. Lee believed the land's location was perfect "for a town," and he drew a line in the year before when the lots of such a town "ought to extend on moderate ground rents to the amount of six hundred per centum." Lee's optimism was based upon the tract's strategic location at the site of the most ambitious water navigation project undertaken in the United States to that time. In 1784, prompted by the urging of George Washington, the Virginia legislature had incorporated the Potomac Company to open the Potomac River to boat navigation for

deepening the river bed and building roads around the river settlements. Potomac navigation, its supporters argued, would enable farmers bordering the river to bring their produce easily to market; in addition, the river would provide the most direct route to the trans-Appalachian west. In 1766 the company was poised to begin construction of a canal to circumvent the Great Falls, and Lee's tract was to be the site of the canal. "The spot," Lee concluded, "is magnificent."<sup>11</sup>

Though more passionate than most, Lee's words reflect the optimism that seized northern Virginians in the years following the American Revolution—an optimism that was firmly grounded in the commercial advantages of the region bordering the Potomac River, particularly above the falls line. Extending along the north shore of the river from Fairfax County below the falls line west through the Piedmont county of Loudoun and into the lower Shenandoah Valley to the Allegheny Mountains, the upper northern reach of Virginia, contemporaries argued, was "a country not exceeded, in fertility of soil and salubrity of air, by any in America."<sup>12</sup>

Most collaborators about the report's possibilities were the inhabitants of the town of Alexandria. The town lay below the falls line of the Potomac River and was accessible to ocean going ships. During the 1760s these geographical advantages filled Alexandria leaders with visions of a prosperous future for their community. The town's origins, however, were more humble. What would become Alexandria was created in 1730 as a



FIGURE 1.1: NORTHERN VIRGINIA, c. 1800

tobacco warehouses on the north side of Great Hunting Creek. In 1738 it was moved to the south side and the British factors who settled there named the small community Belhaven. Not until 1769 did the House of Burgesses incorporate the town as Alexandria. Stimulating Alexandria's growth was the influx of settlers to the Piedmont, the broad swath of land above the fall line of the colony's major rivers and below the Blue Ridge Mountains. Tobacco growers in these newly settled regions, lacking direct access to sea-going vessels, transported their tobacco overland to central collection centers. As a result, throughout Virginia towns appeared on the highest navigable points of the major rivers. Alexandria was only one of many such "fall line" urban centers.<sup>1</sup>

But the town was unique among its counterparts by the exposure and fertility of the backcountry behind it. After 1770 moreover, the wealth to grow by the region's farmers dramatically increased the town's prosperity. In 1784 George Richards editor of Alexandria's first newspaper, asked his readers to consider "the Convenience of our Situation for the Purposes of COMMERCE and receiving for Exportation the valuable PRODUCE of our extensive BACK COUNTRY." He was convinced they would agree that "an Extension of Trade and an Increase of Population, may naturally be expected." In the next twenty years Richards' predictions became reality. Alexandria flourished as increasing numbers of farmers to the west looked to the town as their primary market. By 1804 Alexandria's hinterland

included at least five Virginia counties: Fairfax, Loudoun, Frederick, Berkeley and Jefferson. The town's population growth reflected its growing commercial importance. In 1782 the town had approximately 2,000 inhabitants; by 1800 4,977 people lived in Alexandria.<sup>4</sup>

Until 1800 Alexandria was a part of Fairfax County, which lay outside the bill-hat. The county was created by the Virginia Assembly in 1742 and six farmers and planters were among the first to look to Alexandria as both a marketing and retail center. Though proximity to the river gave the county's agricultural population many advantages, residents of and travelers to Fairfax generally concluded that the county possessed the poorest soils in the upper northern neck. Writing in 1761, the attorney David Stewart categorized the land as "generally thin and the soil a stiff clay." Moreover, "bad management" had reduced the average output of wheat to six bushels for each bushel of seed. Still, farmers who properly managed their land could expect higher yields: "old richens lands which have been well manured will yield from twenty to thirty" bushels of wheat to each bushel of seed.<sup>5</sup>

The marginal fertility of Fairfax County land inhibited population growth and led to stagnant land prices. Though changing boundaries affected population figures, the removal of Alexandria in 1800 from county jurisdiction was roughly balanced by the inclusion of a portion of Loudoun County to the west. Still, the population of Fairfax grew slowly if at all, in

the 1780s the county's population (including Alexandria) fell. In 1788 the estimated total population of the county including Alexandria was 5,303. Eight years later 5,000 people lived in the county. By 1800, however, the total population of the county had grown to 12,650.<sup>11</sup> The stagnant population of the county was reflected in static land values. Indeed, in 1797 Washington had noted that "trade here are not only at a stand but on the decline."<sup>12</sup>

Further to the west lay Loudoun County. Carved out of the western portion of Fairfax in 1747, Loudoun ran along the south shore of the Potomac from below the Great Falls west to the Blue Ridge Mountains. When Johann Schoepf traveled through the county in the early 1770s he concluded that the land was poorly settled but had the potential to be very productive. "Much and very good land," he wrote, remained unused because large planters had appropriated "great and extensive tracts," and small farmers native to the state suffered tenancy. In addition, he found the practices of farmers in the region "very easy and negligent" — no thought being given "to draining and other improvements."<sup>13</sup>

Over time, however, appraisals of Loudoun County's agriculture improved. After the Revolution, Germans, Quakers and Dutch Irish from Pennsylvania visited much of the hitherto vacant land in the western portion of the county, bringing with them more diversified farming. Established planters in the eastern portion of the county, many of whom

leased lands to the new arrivals saw their "relative prosperity" and quickly developed an education in their leasing ability. Storer, for example, believed Loudoun County, under the influence of the new owners, had become "the best farming county in the State," though he acknowledged that "their common lands . . . have been much exhausted." In 1800 Jefferson asserted that improved agricultural practices had turned the county into "the most productive . . . in Virginia."<sup>57</sup>

The vogue for agricultural improvement in Loudoun and its growing reputation as the most fertile county in the state led to a sharp rise in population. Though exact population figures are difficult to obtain, the growth in the size of the militia provides some indication of the change. In 1758 Loudoun's militia numbered "no less than 1,346"; by 1794 the county population of "free white males of 20 years and upwards" was 3,076 and the militia consisted of two regiments. Using a standard multiplier of five, that meant the white population grew from 6,724 in 1758 to 15,384 in 1794. In 1787 the total population (including slaves) was 30,448, and by 1790 the total population has been estimated to have grown to almost 48,000. The large influx of people led to a rise in land prices. In 1794 Washington reported that he had "been offered five pounds an acre" for his lands on "Difficult Run" in the county. He also noted that "land there stands at rising fast in value."<sup>58</sup>

West of the Blue Ridge by the lower Shenandoah Valley and Frederick, Berkeley and Jefferson counties. The lower valley had first been settled in the 17th century and organized into Frederick County in 1738. From the early eighteenth century Virginians realized that the valley was "most suitable for agriculture," and by the late 1700s road construction had begun to link the lower valley with the eastern port towns, including Alexandria. By the 1770s Alexandria had become the lower valley's primary market.<sup>12</sup> Berkeley County was carved out of the northern third of Frederick in 1772, and Jefferson County out of the eastern third of Berkeley in 1801. These political divisions reflected the sharp rise in the population of the lower valley. The population of the entire Shenandoah Valley increased from 18,000 in 1760 to 55,000 in 1790, of which 33,000 lived in Frederick. Thereafter, the population of Frederick and Berkeley counties continued to rise rapidly. In 1790 the total population of Frederick was 11,478; by 1800 it had grown to 24,000. In 1790 18,000 people lived in Berkeley; by 1800 the total population had reached 22,000.<sup>13</sup> The rapid rate of population growth in the lower valley (a 100 percent rise between 1760 and 1800 though only a 34 percent rise between 1790 and 1800)<sup>14</sup> was due largely to the migration into the region from both the north (German, Quakers and Scotch Irish from Pennsylvania) and the east (Anglo and small Virginia planters). Settlers were drawn to the lower valley because it contained "a greater proportion of fertile lands than any other region of the state."<sup>15</sup>

Travelers to the region confirmed this view. Nicholas Cromwell recently arrived in Virginia from England, toured Frederick and Berkeley in late 1774 and found the "land good, the country healthy." In fact, he "wonderingly pleased with these two counties" was he that he "determined to settle in one of them, if ever these times are settled." Cromwell's high estimation of the land was shared by Ferdinand M. Bayard who traveled there in 1781. He described the soil around Winchester (the county west of Frederick County) as "black and deep . . . which requires only light tillage [and] yields abundant harvests." In the same year, Barry Trillock, an English Unitarian minister seeking for a suitable locale for his congregation to settle, found "high elevations" of the valley throughout the tobacco zone. And in 1786 Alexander von Humboldt informed Julius von Sauerstein, a Polish traveler that the "valley is a paradise" and the "land there has prodigious fertility."<sup>14</sup>

Trillock, however, did not take such reports at face value. He carefully examined the lower valley and left a description of the region's varying qualities of land. He identified four distinct soil types running from west to east. Under the North Mountain on the western edge of the Frederick and Berkeley counties, he found "a stiff, clay soil," filled with "irreversible . . . flat and limestones." This land he noted, was "naturally disposed to grass" and "well adapted to wheat." Between this region and Opequon Creek he found a thin "bed of soft limestones" land — not even in

be exhausted." However, on the lands bordering the creek the limestone "gives place to slate . . . accompanied with a light clay." This soil, he wrote "is not so rich . . . but . . . parts of it are well adapted to wheat, grass, and red clover." Moving further east, down the center of the valley the land elevated even more to "the richest limestone." This soil extended to the Shenandoah River, the bottom lands of which were "remarkably fine . . . exceeded by none on the eastern waters."<sup>44</sup>

Tookman's realistic evaluation reveals that if the valley was not "a paradise" it certainly contained much fertile land. Little wonder, then, that the population of the region rose so quickly. By 1800 the population density in Frederick County was above 50 persons per square mile. The same year in Berkeley County, the population density had reached 30 persons per square mile.<sup>45</sup> The inevitable result was higher land prices. Tookman noted that "land is worth from 15s. to 25 12s. sterling, but is so rising." Boyard told a similar story. "Cleared ground . . . brings from three to four pounds [per acre] in the vicinity of Winchester, but the price declines 'the further away you go' from the town. Six years later Washington wrote that lands in Frederick and Berkeley which he purchased for "five pounds per hundred acres . . . I could now sell very readily at five pounds, 10s. 00c." William Stoddard, writing in 1758, remarked that "in the country around Winchester" land averaged from 42 3s. to 45 2s. per acre, and near the town could reach as high as 47 2s. On the Shenandoah River "the usual

price is 40 Livres.' These relatively high prices convinced Trevelin that he should settle in Kentucky where rich lands sold for cheaper.<sup>18</sup>

The obvious advantages of the "So, Potomac country" (in one Lee's words) encouraged the sense of optimism among its inhabitants. Nonetheless, there were reasons for concern. In 1793, for example, Lee wrote to James Madison to discuss Alexander Hamilton's 1791 *Report on Manufactures*. Though a supporter of Washington's administration, Lee feared that if Hamilton's report—which called for high tariffs to promote America's infant manufacturing enterprises—were put into practice it would negatively harm the foundation of America's economy: wool being a nearly agriculture. More dangerous still, he believed that it would lead to a "decrement of the American population. The [most] miserable plough man full of holes[,] full of comfort with his eight or ten blooming children," argued Lee, would be succeeded by "rags, bleated fellows[,] all belly and no legs who can walk but two miles in the hour & manufacture a little."<sup>19</sup> Lee's fear of the growth of manufacturing in the United States and the policies of the Federalist administration reflected a common concern in agrarian Virginia. Lee's words also revealed the rich heritage of republicanism, a body of political thought and language that historians regard dominated American politics and ideology in the years prior to the American Revolution and played a key role in the achievement of American independence.

The historicist discovery of republicanism occurred in the 1980s. Proponents of the "republican synthesis," focusing on the years preceding the Revolution, argue that republican thought first reached the American colonies via British opposition writers of the seventeenth and eighteenth centuries. Historians have traced the roots of republicanism, however, to Machiavelli and beyond to Greek and Roman ideals of citizenship. Central to this body of thought was the concept of public virtue, the willingness of persons to sacrifice their interests to further the general welfare of the community—particularly through unpaid civic service. It was associated with a variety of qualities—modesty, frugality, civility, modesty, industry—perceived necessary for each self-education and devotion to the larger community. The virtuous citizen and office holder would remain constantly vigilant against the temptations of power, because he (never she) recognized that public virtue ensured the survival of republican government, the form of government best designed to protect the common good and ensure liberty. Essential also to the preservation of virtue was property: only landholders, it was believed, would possess the independence required to remain aloof from the sources of corruption. Americans in the 1780s and 1790s, historians argue, were drawn to these beliefs because they feared a rising tide of corruption undermining their liberty and the colonial governments which helped protect it. In particular, Americans viewed the actions of Britain after the French and Indian war—the Stamp Act, the

Thomas Paine, the *Common Sense*, the Quaker Act—as evidence that a corrupted British government wished to impose its arbitrary power on the American populace.<sup>40</sup>

Yet corruption in the scheme of things was not only an external threat. Assurance of the revolutionary era also promised internal corruption. They feared luxurious habits that they were seeking into a nation of “luxury” and “efficiency,” which would destroy their virtue and their ability to maintain republican governments. And most frightening was the fact that this threat to American virtue was a direct result of rising material prosperity which the colonies had experienced in the years prior to the Revolution. Thus they embraced republicanism and its celebration of a spartan life as a means of personal and public redemption. It is this quality of republican thought which has led historians to label it “essentially anti-capitalist” and “reactionary.”<sup>41</sup>

Historians writing within the republican synthesis also contended that American farmers shared many characteristics and internal corruption had existed prior to the young farmers—economically independent due to their ownership of land, as the moral foundation upon which to build the new republic. In Thomas Jefferson's words: “those who labor in the earth are the chosen people of God . . . whose breasts he has made his peculiar deposit for substantial and genuine virtue.” In contrast those who “depend . . . on the cultivation and expense of machines” for their subsistence were

It took for the dream of isolation – lacking economic independence, “the germ of virtue” would be nullified by “subservience and venality” among those in the mechanical ‘arts.’ Such ideas, historians contend, were widespread in the late eighteenth century. They note that even Adam Smith, who cited the division of labor in manufacturing as the source of wealth, recognized its adverse consequences on the laborers subjected to such drudgery. Quoting “in a few very simple operations,” Smith wrote the mechanical laborer “has no occasion to exert his understanding . . . and generally becomes so stupid and ignorant as it is possible for a human creature to become.” Moreover, such workers are rendered incapable “of conceiving any generous, noble, or tender sentiment.” In short, they are left bereft of virtue.<sup>20</sup>

It was this fearful consequence, historians argue, that convinced Jefferson that America’s ‘work-shops [should] remain in Europe.’ American farmers would supply the ‘provisions and materials’ to the manufacturing classes of Europe, in return for the luxury goods produced there. Similar opinions, historians contend, led to Madison’s belief that international free trade – a division of labor between nations, and a surplus of free land in America would ensure that the new nation remained permanently agricultural. American farmers would market their surpluses abroad in exchange for the manufactured goods of Europe, thereby avoiding the dangers of a more developed society. Such ‘dependence through space’ did

not endorse commerce – but it positively limited America's role as consumer trade to that of supplier of raw goods.<sup>38</sup>

Lee's career to 1794 in many ways reflected this republican language. His language was infused with republican imagery. In 1771 he wrote to Richard Henry Lee to inform him of a 'plot to deprive yourself & brother of your seats in Congress.' Though concerned about Richard's future, Henry closed by noting that the scheme of a few 'ungrateful[,] malicious men' would fail due to 'the virtue of my countrymen.' Three years later he was less sure about the virtue of his fellow citizens, lamenting that 'the principles of the people' were 'gone away.'<sup>39</sup> Lee's concern in 1790 arose out of his own experience in the Revolutionary War. As commander of a celebrated cavalry legion, congressional patriarchy had forced Lee to use personal funds to ensure that his troops were outfitted properly. He blamed the public's failure to support the army adequately as a sign of its reluctance to sacrifice for the common good. In contrast, Lee's actions, his willingness to neglect his self-interest for the well being of the nation, reveal the essence of republican virtue. Indeed, as one of Lee's biographers has argued, Lee came to see the Continental army as one of the primary foundations of virtue in America.<sup>40</sup>

With the return of peace, however, Lee increasingly placed his faith in the nation's future upon America's farmers. 'How can America expect to flourish under a system calculated only for commercial society?' he asked in

1790 in response to Hamilton's *Report on Public Credit*.<sup>1</sup> Hamilton believed that if the federal government assumed the state debts incurred during the Revolutionary War the interests of the commercial classes who held these debt certificates would be more firmly attached to the new national government. In contrast, Lee charged that the commercial classes provided an uncertain foundation for the nation. His plan's plan, he contended, would give rise to a class of "stock jobbers" who would "appropriate" "the circulating cash of the community" to activities "unproductive to society." Lee believed that "commerce ought to be considered only as the handmaid of our agriculture." "Think however," he wrote, "we are by situation[] a people and land agricultural . . . I seriously pray that the U States may in the latest ages continue to possess the character & enjoy the blessings of tillers of the earth."<sup>2</sup>

Yet if Lee's proposals were directed to this end, his actions after the war concluded pointed in a very different direction. In early 1792 Lee returned to his home in northern Virginia. Stafford Hall, married his cousin Mollie Lee, the daughter of one of Virginia's leading men, Philip Ludwell Lee, and plunged actively into the economic and political life of the northern neck. Among his many purchases was a share in the Potomac Company and the five hundred acre tract at the Great Falls. He invested in the Potomac Company because he believed that clearing the Potomac River would open an "internal navigation" between Virginia and the country west.

of the Mississippi. Despite his stated dislike of commerce, Lee believed that the completion of the river would have the effect of "stimulating . . . the interest of Virginia by the strong tie of commerce [to] the Western world." To Madison he wrote, "the potomack river will strengthen our commerce [too] to the West 'by the easy exchange it affords for those things mutually wanted."<sup>17</sup>

Lee's motives were not entirely disinterested. By his purchase of the land and creation of a town at Great Falls -to be called Metairieville- he clearly hoped to profit by the increase of commerce on the Potomac. In 1786 Lee even tried to persuade Madison to join him in the venture. "A judicious arrangement" of the parcel, he wrote to Madison, "would ensure to us both a very independent fortune." Lee anticipated that the site would become a center of trade and that land values would rise sharply when the Potomac Company finished its canal around the falls. Madison declined Lee's offer but he did outline, at Lee's request, the advantages of the situation at the Great Falls. Madison cited three sources of profit: "The singular fitness of the situation for every species of water works, windmill mills, Paper, Shaving & Fluting [sic] Mills, sawmills, &c. &c.", "the importance of the situation as a meeting place for an extensive commerce" with the backcountry, and "the convenience of the place for a manufacturing Town."<sup>18</sup>

Lee's land speculation was in no way unusual and his choice of investment seemed a wise one. Lands located on "navigable waters"

contemporaries imagined, had a "tendency to increase" in price.<sup>22</sup> When the Potomac became navigable the value of the lands at Great Falls most certainly would rise. But as Madison's description indicates, Lee envisioned more than simple land speculation at the Great Falls. Instead, he anticipated an industrial town where the produce of the backcountry—primarily wheat—would be processed and shipped, and where the canal works constructed by the Potomac Company would provide a reliable power source for a number of industrial operations. Lee apparently had no fears that the mills and barges he planned would produce a work force of "ignorant blacked fellows." Certainly, he did not allow such traditional republican concerns to cloud his business judgment. Indeed, there is little indication that he perceived any discrepancy between his political values and his business transactions.

Other northern Virginians viewed a similar contradiction between their stated beliefs and their actions. Most famously, Jefferson, who espoused republicanism and dependence on markets, could also write (in the same book) that it would be in the "interest" of an independent America "to throw open the doors of commerce, and to knock off all shackles, giving perfect freedom to all persons for the vent of whatever they may choose [and] to bring into our ports, and selling the same as others."<sup>23</sup> Moreover, Jefferson saw northern Virginia as the center of this trade. He perceived both the Potomac and Shenandoe like "highways" of that name to the most fertile

noted "in the teeth of the East." He also noted to make this a reality. In 1794, he observed to George Washington that "All the world is becoming commercial." Though Jefferson suspected that he was uncertain "whether commerce contributes to the happiness of mankind," he concluded that Americans could not afford to "separate" themselves from such developments, if only because "our crimes have had too full a taste of the comforts furnished by the arts and manufactures or to deprive the use of them." Americans must not fight this trend; rather, they must "endeavour to share as large a portion as we can of that modern source of wealth and power." And if Virginia was to arise to that alignment, the Potomac River must be opened for navigation.<sup>20</sup>

Washington presents a similar inconsistency. Identifying himself first and foremost as a farmer, Washington recognized that the "wellfare and prosperity" of America "depended upon the cultivation of our lands." And like Jefferson, he believed that "the life of a Husbandman of all others the most delightful," personally finding "no where . . . so great satisfaction, as in these modest and useful pursuits." In contrast, he was uncertain "whether foreign Commerce is of real advantage to any country," whether the "luxury, effeminacy and corruption which are introduced with it are counterbalanced by the opulence and wealth which it brings." If an evil, however, Washington concluded it was an evil that could not be avoided. As he noted to Jefferson, "From Trade our Crimes will not be restrained." The

only alternative was to place commerce "under proper regulation, freed as much as possible from those vices which luxury, the consequence of wealth and power, naturally introduce." And with this Washington plunged headlong into the Potomac project, concluding that commerce between the west and east would not be a "moment of antipathy," binding "all parts of the Union together by unbreakable bonds."<sup>10</sup>

This contradiction extended even to people such as James Rumsey. Most famous as the inventor of an early steamboat, Rumsey was a resident of Berkeley County, and worked as a blacksmith, country merchant, and building contractor before he was hired by Washington as superintendent of the Potomac Company. Rumsey's experiments with various types of boats began in the early 1760s. By the mid-1760s he had devoted himself entirely to the development of his steamboats, which soon included new designs for steam-powered saw and grain mills, and a new steam-powered method of raising water. A successful trial of his steamboat on the Potomac River at Shepherdstown in December 1787 attested Rumsey of the efficacy of his design, but a shortage of capital compelled him to travel to Philadelphia in March 1788. Once there he secured the support of a number of influential bankers (including Benjamin Franklin), and formed the Rumseyan Society to raise funds for the further improvement of his inventions. The company decided that Rumsey could best succeed in England, and in May 1788 he departed for London where he resided until his death in 1793.<sup>11</sup>

Ramsey's commitment to technological innovation earned him for him his rural home. Moreover, it promised to transform the region's agrarian way of life. Still, Ramsey reminded his brother-in-law Charles Morrow to "sell your property, goods and all for a good farm," because "after all is said and done . . . it is the most comfortable life to be a contented farmer." In contrast, Ramsey expressed his discontent in Philadelphia where he found himself surrounded by "wasty Leeches and Sharks." London was even worse, that city's "men of genius" were nothing but "a set of mean gossamers [sic]." London, he noted, was "the capital [sic] of the world . . . possessed [sic] with [sic] agreeable proportion of all the knowledge thereof," but it was "without much of its Virtue" for there "almost nothing can be accomplished by Industry." In the midst of such corruption, Ramsey lamented "Living [sic] in the powerful [sic] shadow of Babel [sic]." However, he never returned to Virginia. Instead, he shared the fame and fortune that a successful steamboat would bring. Like Lee, Jefferson, and Washington, Ramsey perceived an inconsistency between his behavior and his stated preferences.<sup>27</sup>

For the historian, the actions of these Americans raise hard questions about the nature of republicanism in the early republic. As historian Gordon Wood has noted, the Revolution unleashed "unpositive and unexamined forces" that the republican synthesis simply fails to explain. Wood is not alone in this reflection. Increasing numbers of historians have

been struck by the same inconsistency between republican "theory" and national "reality."<sup>17</sup> As a result, a powerful explanatory paradigm, predicting the republican syndrome but finding new roots in recent years, has sought the ideological sources of American society as Lockian liberalism. Instead of looking to the English radicals, these scholars see the ideological foundation of American society and polity in the writings of John Locke, specifically in his ideas regarding individual rights, consent of the governed, and the limited state.

Locke provided the clearest expression of his thought in the *Second Treatise of Government*. He began by asserting "the equality of Men by Nature," and argued that in the "State of Nature," every person had an equal right to "Life, Health, Liberty, or Possessions," and hence to take any measure necessary to protect these rights: as, as Locke expressed it, "every one has the Executive Power." Further, he held that all who expended their labor on the land could possess it. "God gave the World," Locke wrote, "to the use of [the] Industrious and Rational, (and Labour was to be his Title to it)." Yet "the Enjoyment" of these rights remained "very uncertain" in the state of nature: for "Man" was "constantly exposed to the Invasion of others." As a result, people united "into Civil Societies" for the mutual Preservation of their Lives, Liberties and Estates." The "great end [and] aim" of government, then, was "the Preservation of . . . Property." People consented to government in order to protect their natural rights (especially

property), and government's authority was to extend no farther than the constitution defined. of course, in the preservation of each individual's "Liberty and Property." Essential also to the preservation of liberty was the people's right to dissolve a despotic government. When legislators exercised power arbitrarily—that is, when they "unconstitutionally take away, and destroy the Property of the People—the governed Locks must, were 'absolved from any further Obedience'" and would establish a new authority "to provide for their ... Safety and Liberty."<sup>28</sup>

Scholars writing before the rise of the republican synthesis stressed the centrality of Locke's thinking to America's revolutionary generation. Clinton Rossiter, for example, argued that Locke was "almost *universally*" among the ideologues influential in American whigs "the most popular source of revolutionary ideas."<sup>29</sup> More downstandingly, Louis Hartz argued in 1955 that America was Lockean from the outset. American society began "with Locke; and . . . stays with Locke," in the process developing "no absolute and constant standards . . . for him."<sup>30</sup> Hartz argued that Americans gravitated to Lockean ideas because "in America one . . . found a society sufficiently fluid to give a touch a meaning to the individualistic norms of Locke." In particular, Hartz pointed to America's lack of feudal institutions "which ensured social elasticity and a nation populated by 'dynamic liberal farmers' and 'unquiescent entrepreneurs'." "American social

freedom" thus became "the master assumption of American political thought."<sup>61</sup>

The republican synthesis largely obliterated this interpretive position. Its proponents argued that while Locke may have provided "the skeleton" of revolutionary thought, the "flesh" is to be found in classical republican sources. But "neo-Lockean" scholars are rehabilitating Locke. They claim that republicanism underwent significant alteration in the early republic and in the process developed new, liberal constitutions.<sup>62</sup> While historians dispute the timing of the change, the reasons for its occurrence, and even which social and political groups supported the new liberal ideas, a general agreement has arisen that colonial America was pervaded by republican (bourgeois and republican values) and that by the early nineteenth century a free, democratic, and liberal society had emerged (even if republican language, bereft of its original meaning, survived). The entire conceptual framework of the Anglo-American world changed in the process. Indeed, the dominant metaphors used to describe and understand society were revised. "Triumphing over the idea of a 'great chain of being' which looked all of God's creatures up a fixed, hierarchical order was the concept of the 'race of life,' which conceived of all individuals as ambitious, striving, and free to establish their own position in society through labor. In this process, republicanism could not survive unchanged."<sup>63</sup>

However much such historians may disagree about secondary issues, they have sketched the general contours of a interpretive paradigm which saw great changes in the conceptual frame of republican thought in the late eighteenth century and which helps to explain the changes in northern England. The switch to Lockean concepts was driven by the revolutionary struggle itself. When Americans found that alternative definitions of liberty – both the corporate body's right to self-determination derived from classical republicanism and the right to secure possession of property which the English common law protected – failed to convince Parliament of the illegality of colonial taxation, they resorted to "the liberal concept of liberty" espoused by Locke. The natural rights which he claimed all men equally possessed – including the right to consent to one's government – provided the most effective defense of the American case. However, the shift implied an enhanced defense to the individual. Since sovereignty now lay entirely in "the great body of the people" rather than with the various free, the paramount end of government shifted from a desire to preserve the community to the need to protect the "life, private property, and . . . independence" of its individual members.<sup>20</sup>

Such wholesale changes in the nature of liberty forced a re-conceptualization of republican ideas. In particular, Americans fundamentally altered the central republican construct of virtue. Since a liberal government belonged to all property holders and not just the

violence less, it became imperative to moderate violence among the political populace. However, classical virtue was beholden; it "ran against human nature" and the selfishness of all persons. That was all the more true in age of commercial expansion and prosperity.<sup>10</sup> Thus, the American redefinitions of virtue in the revolutionary are involved eliminating its specific, anti-commercial facets and attaching a new significance to individualism. Americans began to recognize the value of industry and diligence in producing "disciplined and energetic individuals" who would provide a backbone for political stability. Moreover, contemporaries recognized that commerce and trade encouraged these qualities. The wealth that commerce promised to all -from the tradesman to the merchant to (most importantly) the farmer -would lead to a wider diffusion of property. With greater numbers of property holders, and the prospect of wealth open to all, there would be increased concern among the populace with property rights. Thus, the industry and self-interest of each citizen became the means to increase their concern for civil vigilance (over civil and political rights).<sup>11</sup>

Still, this concern was not without danger. Contemporaries feared that an increase in trade and the economic freedom of individuals to pursue their own interests might lead away from public virtue. Preoccupied with the pursuit of profit, individual citizens might ultimately end up retreating into private spheres. Thus, though commerce promised industry, wealth

and prosperity, it also threatened to challenge the very foundations of republican government: a politically active citizenry. He expressed with genuine struggles to win the 'vote of life' and reap the rewards of talent and labor, citizens might abandon any interest in public affairs. This "intellectual dilemma"—the reconciliation of private industry and property with the needs of the larger community—was widely recognized by American leaders. The coming of independence forced them to confront the problem directly.<sup>18</sup>

About the fundamental shape of the political economy of the republic, Americans shared a wide agreement: agriculture provided the economic basis of American society (indeed it could be no other way since nine-tenths of Americans were tied to the land).<sup>19</sup> Thomas Cope, for example, quickly conceded that agriculture was "the great leading interest" in America from which "most of our other advantages result," but he argued that "sound policy requires not giving every encouragement to commerce and its consequences [sic]."<sup>20</sup> Central to this view was the belief that only if America developed its manufactures and commerce would the nation attain "real independence." He viewed the development of commerce as essential to ensure American access to manufactured goods unavailable or too expensive to be produced at home, and as an outlet for the surpluses of American farms. Such arguments were widely accepted; commerce was considered the foundation of agriculture. More controversial were his views on

manufacturing. Manufactures, he contended, would provide stable internal markets for agricultural supplies (both livestock for workers and the raw materials for production); a reliable source of finished goods for American farmers; and would ensure a steady source of military material in case of war. Cass believed that manufacturing and agriculture were complementary, not conflicting interests. He argued, then, not simply for the expansion of the American economy, but that it makes a "more complete stage of social development."<sup>40</sup>

In northern Virginia where, as this dissertation demonstrates, Levi's entrepreneurial projects were commonplace and Ramsey's involvement was celebrated and emulated, Cass's words were far more at home than Jefferson's dismissal of commerce and manufactures. The enthusiasm for commerce and enterprise required northern Virginians like Americans throughout the northern states—to relinquish traditional republican values and tentatively, to construct a world view that might justify and explain the striving, ambitious behavior of the populace (and the exclusion of women and African-Americans from the "man of life"). The economic growth and optimistic outlook which provided the impetus then played it as the manifestation of the early republic.

Yet at the same time that northern Virginians shared in the spread of liberal values and the increasing acceptance of a commercial economy, the region remained profoundly different from the northern states. Northern

Virginia was a part of the slave South. Consistent with his commercial commitments, Lee, like Washington, was a slaveholder. In 1781 he owned eighty slaves situated in Westmoreland and Loudoun counties, while Washington owned 200. And these planters were not alone. In the five counties west of Alexandria, slaves represented over 20 percent of the total population, and the slave population in the region grew during the twenty-five years following the Revolution. In 1781 Alexandria's total population amounted to 2,431, of which 675 or 28 percent was slave. By 1800, the town's slave population had grown to 875, or 15 percent of the population. Ten years later the population reached 5,287, including 1,684 slaves or 32 percent of the total. In Fairfax County, the slave population was even greater. In 1781 the county population (including Alexandria) totalled 8,448. Of this amount some 3,628 or 43 percent was slave. By 1800 the slave population had risen to 5,124 or 60 percent of the total. In 1820, 8,483 slaves lived in the county, 43 percent of the total population of 19,914. In Loudoun County population figures are somewhat harder to recover, but in 1347 the county's population was 16,448, of which 3,722 or 23 percent was slave.<sup>22</sup>

West of the Blue Ridge, the counties of the lower valley also had substantial slave populations. Winchester, the primary town in Frederick County, had a total population in 1797 of 1,406, which included 170 slaves, or 14 percent of the total. In 1800, Charles Wade estimated that some 520

or 17 percent of Winchester's residents were slaves. In Frederick County itself, the 1792 population totaled 12,000, of which 2,420 were slaves (20 percent). By 1800, the slave population had grown to 3,734, representing 30 percent of the total. In Berkeley County, the 1792 population totaled 10,401, including 1,210 slaves (12 percent of total). By 1800, the slave population had climbed to 1,800, or 17 percent of the total. As Robert Mitchell points out, these slave populations distinguished Frederick and Berkeley counties from the rest of the valley, and "created similarities in slaveholding patterns between these two counties and the counties of the western Piedmont."<sup>10</sup>

Despite this commitment to slavery, there were in the region opponents of the institution. As in the North, the revolutionary ideology led some to question the morality of human bondage. For example, in the 1794 obituary of "Negro Tom: the famous African Calculator" of Fairfax County, Alexandria's newspaper provided a lengthy description of his prodigious mathematical abilities, the writer concluding that Tom's abilities demonstrated "the genius, capacity and talents of our ill-fated black brethren," and admonished those who believed in the "supposed inferiority of their intellectual faculties." Such "assertions," the author continued, were "in all founded on fact, as they are attested to their testimony." The trial of "Negro Moses," acquitted for murdering a particularly brutal

committee in 1793 elicited more antislavery sentiments from those of the institution.<sup>10</sup>

Perhaps more troubling to slaveholders, however, was the creation of the Alexandria Society for the Relief and Protection of Persons Illegally Held in Bondage in 1796. The constitution of the Society argued that "Life, Liberty, and the pursuit of Happiness" were the birthright of "every part of the human race," including "our African Brethren." Society members rarely publicly identified as the newspapers, but consisting of the town's leading Quakers proposed educational campaigns directed "to the consciences of individuals" and boycotts "of all such commodities, cultivated or manufactured by slaves." In its efforts to "obtain a repeal or amendment of the laws respecting Slavery" the Society publicly attacked the omnibus slave act passed by the Virginia legislature in 1796, pointing out how far it differed from "the general maxims of justice, and the maxims of the constitution, as expressed in our Bill of Rights."<sup>11</sup>

Still, slaveholders apparently did not consider such attacks particularly ominous prior to 1800, judging by their responses to the Society's broadcasts. When defenders of slavery responded at all, they dismissed the antislavery advocates with derision and sarcastic asseps. In response to the Society's call to repeal the 1796 slave law, for example, one writer accused Society members of self-interest, and proposed a series of absurd laws that included allowing a slave to "run away whenever he or she

books proper," and requiring that anyone who attempted to rescript manuscripts pay any member of the Society who used them for that action £100.<sup>48</sup> By the end of the decade, however, the climate of opinion in Virginia was beginning to change. In 1798 the Virginia Assembly passed another omnibus slave act that took direct aim at abolition societies in the state. Free persons who incited slaves to insurrection or murder were punishable by death; those who harbored slaves without the consent of the slave's master were to be fined £10, and members of antislavery societies were disqualified as jurors in suits in which slaves sued for freedom.<sup>49</sup>

Historians have traced the decline of antislavery sentiment in the state to the slave revolt at Santa Domingo which began in 1794 and continued into 1804. More important still was Gabriel's Rebellion, an abortive slave insurrection that took place in Richmond in 1800 and crystallized the shift in opinion. In the wake of the revolt, the Virginia legislature passed a series of laws restricting the movement of slaves and free blacks. Events convinced most white Virginians that blacks and whites could live in peace only if the former were held in chains. As one Alexandria writer put it, though slavery may be "an inextinguishable cancer" in society, the "poison which most men seek in retirement" "makes us refuse bear those ills we have, than try experiments which we know out of." Thus, "necessity" forced Virginia to retain slavery.<sup>50</sup>

But Virginians of the early republic also defended slavery in other ways. Many slaveholders emphasized that their property rights outweighed any rights of the slave. When Philip Delly traveled to Philadelphia in 1788 he actually took with him his "writing man," a "Molatto boy, slave for life." The Philadelphia antislavery society, however, approached the boy and convinced him to sue Delly for freedom in the Pennsylvania courts. Delly responded furiously. After losing the court case, he related his tale to the *Alexander's newspaper* as a caution to all Southerners heading north. Though he professed himself "not . . . an advocate of slavery," he vehemently argued that the Pennsylvania court had undertaken "a most modest and daring attack upon the sovereign rights of Virginia." More important, Delly wrote, "I considered my rights as very unjustly invaded by the 'steering' of his 'property'"<sup>12</sup> Virginian slaveholders, then, were simply interested in protecting their local property.

Finally, this period also saw the first use of science in the defense of slavery. In *The State of Virginia*, Jefferson concluded with "great diffidence" that "the blacks . . . are inferior to whites in the endowments both of body and mind." He argued, moreover, that these "physical and moral" differences were "fixed in nature," "their" discernible through observation and documentation. More important still were the political and moral implications of these differences; they offered, Jefferson wrote, "a powerful obstacle to the emancipation of these people." Blacks were a

distinct biological 'race,' inferior to whites and therefore suited for slavery. Linked with traditional liberal ideas concerning the inviolability of property rights, and the growing conviction that only the abolition of slavery could ensure social peace in Virginia (a fear to which Jefferson also gave voice), economic arguments in favor of black inferiority provided an essential linkwork for the defense of slavery.<sup>12</sup> In the face of such arguments, antislavery sentiment in Alexandria collapsed. The last public meeting of the Alexandria Society was held May 21, 1800. It would not be heard from again. As one member wrote in 1816: "We are in fact dead; and I may say, I have no hope for resurrection."<sup>13</sup>

The demise of the society clearly indicated that the vast majority of Virginians in this period "accepted slavery as a normal feature of life."<sup>14</sup> Yet historians of the South have repeatedly argued that slavery was incompatible with the kind of economic development found in northern Virginia after the Revolution. Most forcibly, Eugene Genovese has argued that slavery hindered efforts at agricultural improvement, urban growth, technological innovation, and, ultimately, industrialization. Though spanned by and tied to the capitalist world market, at best the Southern slaveholding class was preoccupied: the master-slave relationship giving rise to a set of paternalistic, even aristocratic attitudes that retarded labor and industrialization. Slavery, according to Genovese, was more than an economic system: the ownership of slaves bestowed status and honor upon

the master. Consequently slaveholders invested their profits in more slaves and land, lessening the capital available for alternative investments. Genovese stressed, moreover, that the large population of slaves and the poverty of rural whites severely limited the size of Southern consumer markets, inhibited the rise of new industries and the development of urban centers. More recently, Elizabeth Fox-Genovese has argued that the slave plantation obstructed urban growth and consumer markets because white households remained a center of production in handicrafts and clothing long after the focus of production had moved out of northern households. This left the southern household largely outside the marketplace, and further inhibited the development of local networks of exchange and urban centers.<sup>12</sup>

At risk, however, Genovese and Fox-Genovese's arguments have not been proven by empirical evidence but by theoretical assumptions. "Capitalist development," they write, "depended upon a free market in labor-power and upon absolute property." In contrast, "The essential character" of the Antebellum South "derived from the master slave relationship." Though absolute property rights existed in the South (in fact, slavery's survival depended upon them), its failure to develop a "market in labor-power" meant that it was not capitalist. Rather, Southern social relations constituted a "significant deviation from the bourgeois society that was developing in the North . . . on the basis of free labor." In short, Fox-

Genovese and Genovese's definition of capitalism—the appearance of wage labor—compels the conclusion that the South, with its dependence on slave labor, was not capitalist.<sup>27</sup>

Thus the existence of slavery hindered economic development, most notably by slowing the growth of consumer markets and creating a shortage of capital for nonagricultural pursuits, cannot to be proved. But the fact that slavery imposed limits does not preclude economic progress within such an economy. Nor does it preclude the development of an ideological and materialist outlook. As James Oakes has argued, the South never wavered from its devotion to the liberal-democratic values—absolute property rights, free trade, and political equality for all white men—that gained widespread acceptance in the North and South after the American Revolution. The existence of slavery may have complicated life for many thinking Southerners, and created many “contradictions” in Southern social and economic life, but it did not—except for a few utopian individuals—shake the South’s fundamental ideological outlook. Moreover, slavery did not stop northern Virginians from taking aggressive action to develop their regional economy. After the Revolution, the inhabitants of this region actively diversified and improved their agricultural economy: built mills and turnpikes, created numerous towns and villages, opened financial institutions, and stood at the forefront of technological innovation in America. Few of these deeds, of course, conform to Fox Genovese and

DeCoursey's theory, but that his – and history – is more complicated and less elegant than DeCoursey should come as no surprise.<sup>12</sup>

In the years after the Revolution, then, northern Virginia did not fit the paradigm. Connected to the institution of slavery, the region nonetheless played an important role in the development and proliferation of liberal values that rationalized and sanctified the enterprising and acquisitive nature of its inhabitants. There was no going back – regardless of whatever unhappiness some might feel at this new world. As for Lee, he celebrated the new age, pointing to the efficiency that commerce and trade brought to the region. Linked to world markets by the Potomac, the “industrious” inhabitants of the *Rio Potomac*, he believed, were “the most wealthy set of husbandmen in proportion to the extent of country within these States.” Surveying the region from Mount Vernon, Washington could only agree: “The spirit for Trade pervades these states,” he concluded, and “is not to be restrained.”<sup>13</sup>

#### Notes

1. Henry Lee to James Madison, October 25, 1786 (September 4, 1785 and November 19, 1786), James Madison Papers, Library of Congress (hereafter LCI). See also Madison to George Washington, November 8, 1787 (Gordon Hunt, ed., *The Writings of James Madison*, 9 Volumes (New York: G.P. Putnam's Sons, 1902-1910), 3: 381; Thomas Heyl, *Lightfooters: Harry Lee* (New York: Charles Scribner's Sons, 1931), 179-183; Charles Rogers Light House, *Henry Lee and the Legacy of the American Revolution* (New York: Alfred A. Knopf, 1961), 71-75.

2. Thomas Lee, *Observations on the River Potomac, the Country*

*Alexandria and the City of Washington* (New York: Russell Levine and Son, 1790) 18.

3. The early history of Alexandria can be found in the following sources: Thomas Milton Penrose, *Eighteenth Century Alexandria, Virginia, before the Revolution, 1748-1776*, Ph.D. Dissertation, The College of William and Mary, 1977, 3-59 and passing James Donald Hanson, "From Empire to Commonwealth: Alexandria, Virginia, 1740-1780," Ph.D. Dissertation, University of Maryland, 1994 41-548 and Fairfax Harrison, *Landmarks of Old Prince William: Study of Origins in Northern Virginia*, 3 Volumes (Richmond: Old Dominion Press, 1934) 2: 428-417. On Alexandria as a "hill town" town see Ronald Rayner Quinn, "The Empire and Early Development of the Virginia Piedmont Towns," M.A. Thesis, University of Maryland, 1971, 1-20, 150-238.

4. *Yorpsin Journal* and *Alexandria Adventure*, February 5, 1764. I use the term "Waterlands" as the term taken up by J. William Harris, *Thin Earth and Center in a Slave Society: White Liberty and Black Slavery at America's Waterlands* (Middletown, CT: Wesleyan University Press, 1989), 199. Waterlands describes a geographic region linked by commerce (as Alexandria provided the primary market for the free counties listed, though it was never without competitors, particularly from Dumfries, in Prince William County and Georgetown, Maryland. See also Douglas C. North, "Location Theory and Regional Economic Growth," *Journal of Political Economy* 49 (June 1980): 327 who argues that no economic region can be defined by a common export base. The five county region of northern Virginia under examination seemingly shared a common export base. Sources for Alexandria's population: Johann David Schoepf, *Travels in Cumberland*, 1782, 1784, 3 Volumes; Alfred J. Morrison, ed. (New York: Ferguson Publishers, 1968) originally published Philadelphia, 1812) 1: 329; T. Michael Miller, *Antiques and Monuments of Alexandria, Virginia*, 1780, 1828, 3 Volumes (Dover: MIT Heritage Books, 1992-1993) 1: viii.

5. Conrad E.R. Richards, ed., "By David Stewart's Report to President Washington on Agricultural Conditions in Northern Virginia," *Virginia Magazine of History and Biography* 41 (July 1935): 190-97. The report appears reprinted in George Washington to Arthur Young, December 3, 1794, *Letters from His Excellency George Washington to Arthur Young and Sir John Sinclair Containing an Account of the Embellishing Alexandria, Cotton and Sugar*, 1840, 80-47. In 1800 John A. Basso, an agricultural reformer, stated that on average northern Virginia farmers used a half bushel of seed per acre. Following this measure, Stewart's calculations reveal that lands in Fairfax County produced about two to three bushels per acre and Basso, A. *Treatise on Practical Farming, Embracing Particularly the Following Subjects, viz., The Use of Plaster of*

*Form, with Directions for Using It, and General Observations on the Use of Other Measures. By Diego Pineda. Trans. Jeremy of Orono, Method for Converting From Tons Into Drapery, and Fromward in General (Pir-Joshi. Town, MD; John B. Cohen. 1940) 31-32*

4. Sources for 1790 population: *Calendar of Virginia State Papers*, 11 Volumes (Richmond 1840-1895) 3: 415 1790 population; *New Northern Decade Series: Jason Aronson Fairfax County, Virginia: A History* (Fairfax, VA: Fairfax Board of County Supervisors 1976) 34 population in 1800 (ibid). Nicholson (24) states that Fairfax's population in 1800 was 11,875 but this figure does not correspond to the tabulate (which over 18 is 4 slaves under 18 and estimated slaves over 18 listed). My total is derived by re-calculating the tabulate provided. The growth of Fairfax between 1790 and 1800 can be attributed to changing county boundaries. In 1790 the western portion of Loudoun County was added to Fairfax, adding another 4,024 residents to the county. In addition, the creation of the District of Columbia left the prosperous West End of Alexandria containing approximately 180 residents within the county. When the population from the portion of Loudoun is subtracted from the county total, the population of Fairfax is only 8,446 – a slight rise from 1790. On the changing boundary and additional population see Nicholson, *Fairfax County*, 34, 36; and Samuel Shepley, ed., *The History of Leigh of Virginia, from October Session 1793 to December Session 1808*, (London: \_\_\_\_\_, 3 Volumes (New York: AMS Press, Inc., 1970 originally published, Richmond 1808) 3: 167-168. On the west end of Alexandria see Timothy J. Hill, "The Origins of West End and the Lytle River Turnpike: Urbanization and Economic Change in Northern Virginia, 1790-1820," M.A. thesis, Washington State University 1995 60-71, 130.

1. Washington to David McCarty, November 1, 1797, *Letters and Symplicities of George Washington* (New York: Doubleday, Page & Company 1936), 246. I have discussed as price quotations in Fairfax, though it is safe to assume that land prices were similar to those William Blackland quoted for lands on the Rappahannock. 1 lb = 42 1/2 oz (42 00 to 43 1/2 depending on proximity to the river). *Observations on the Agriculture of the United States of America* (London: W. Bulmer and Co., 1841) 28. Currency calculations in this and subsequent footnotes were made according to the following exchange rates: 1800 VA = 8000-90 and 1800 VA = 275 Sterling. In addition, 25 = 80 shillings, and 1 shilling = 10 pence (6). See John J. McCusker, *How Much is that in Real Money...? A Historical Price Index for Use as a Measure of Money Values in the Economy of the United States* (Pewaukee: American Antiquarian Society, 1993) 339; also, *Money and Exchange in Europe and America, 1800-1775*.

A. Handbook (Chapel Hill: The University of North Carolina Press, 1978), 38.

14 Richard Trench in *Consideration*, 2: 26-32. However, travelers' accounts of poor roads and agricultural practices may have been exaggerated. While on the road in Maryland between Baltimore and the federal city, Isaac Weld, *Travels Through the States of North America, and the Provinces of Upper and Lower Canada, During the Years 1789, 1790, and 1791*, 2 Volumes (London, 1800), 1: 37, noted that "the best cultivated parts of the country are not seen from the road, which passes chiefly over barren and hilly tracts, called ridges." The reason for comparing the road over there to, because it is found to last longer than if carried over the flat part of the country, where the soil is deep . . . after a road is once cut, they never take pains to keep it in good repair."

15 James Chapin Bradford, "Slavery and Government in Loudoun County, Virginia, 1780-1800," Ph.D. Dissertation, University of Virginia, 1978, 14-30; Harrison, *GM*; Brian Wilentz, 401. Wilentz P. (Bos), "The Race of Tenancy in Virginia," *Virginia Magazine of History and Biography* 95 (October 1990): 402-441. Bos calculates that in 1780 "one-third of [Loudoun] . . . residents were tenants rather than freeholders" (403). James B. Goggin, "The Northern Neck of Virginia: A Tobacco-Grown Farming Region in the Antebellum South," *Wm. & Mary College Studies in the Social Sciences* 14 (June 1977). David C. Wilson, ed., *Slavery in the Human Geography of the Southern United States*, 74-75, 77-80; Richards, "Slaves's Report," 280; Jefferson quoted in Rodney R. Trice, "John James of Loudoun," *William and Mary Quarterly*, 3rd Ser., 2 (January 1925): 22.

16 Miles was in 1780. Harrison Williams, *Legends of Loudoun: An Account of the History and Homes of a Border County of Virginia's Northern Neck* (Richmond: Garrett and Mann, 1886), 123. Miles was in 1784 (Calendar of State Papers, 7: 144; Nechamias, *Frederick County*, 14, multiplies the number of white families above 18 by four to reach the white population in Fairfax. Population in 1780. Nath. Schachner-Yates and Florence Speckman Lane, *The 1782 Census of Virginia . . .*, 2 Volumes (Springfield, VA: Genealogical Books in Print, 1987), 1: 23-25. Population in 1790. Williams, *Legends*, 123. The *Columbian Mirror and Alexandria Gazette*, June 21, 1798, listed the population of Loudoun as 28,804, as did *The Herald*, the source was the 1790 census. Washington to Robert [Lafayette], July 28, 1794, *Letters and Reminiscences*, 170-171. Robert D. Milder, *Commerce, Capitalism, and Frontier: Perspectives on the Early Shenandoah Valley* (Charlottesville: University of Virginia, 1977), 82, notes that "the best farmlands" in Loudoun "were selling for \$100 to over \$500 per acre" (ibid. 84, from \$9.99 to \$14.99). In 1801 John Fauson Moore advertised the sale of 3,500 acres (700 of which were cleared) in Loudoun County, fifty miles from

Alexander, at \$2.10 per acre for 18,365, see *Times and District of Columbia Daily Advertiser*, July 19, 1860.

11. Warren Raymond Babson, "Three Free Prospecors," *Frederick County, Virginia, 1758-1842*, Ph.D. Dissertation, University of Virginia, 1965, 31-54, 81-82; *Marche's Commonwealth and Frontiers*, 38, 180-181, 198, 227.

12. Mitchell, "The Shenandoah Valley Frontier," *Geographical Perspectives on America's Past: Readings on the Historical Geography of the United States*, David Wentz ed. (New York: Oxford University Press, 1979), 154; Charles York, *Topographical Description of the Counties of Frederick, Berkeley & Jefferson, Situated in the State of Virginia*... (Washington, VA: W. H. and A. 1822), 43, 50. Vance used the original census for these population figures. I have used them instead of Marche's numbers for the same years in *Commonwealth and Frontiers*, 89-90. The totals are from *Heads of Families of the United States Taken in the Year 1790, Records of the State Governments, 1790-1793*, Virginia (Washington, D.C.: Government Printing Office, 1908), which "used the county reliable records for the years 1782 to 1786 for reconstructing the 1790 population." He notes, however, that historians have been "highly critical" of the methods used by the Bureau in their reconstruction, 89. Marche's numbers are close to Vance's though generally lower. Moreover, he finds a 6.1 percent decline in Berkeley's population between 1790 and 1800. Though a decline may have been possible due to high rates of emigration, this seems unlikely given the continuing high price of land and the successful 1801 effort to create Jefferson County out of the eastern portion of Berkeley. On the rise in land prices see below.

13. The percentages figures were derived by combining the populations of Frederick and Berkeley in 1790 and 1800. The total population of the lower valley grew from 25,000 in 1776 to 46,075 in 1790 to 48,515 in 1800. Everett R. Rortman and Anita H. Rortman, "People in Process: The New Hampshire Towns of the Eighteenth Century," *Small Worlds, Large Questions: Eighteenth-Century North American Social History, 1680-1800* (Charlottesville: University Press of Virginia, 1984), 121-225, describe a similar pattern of rapid population growth during the period of initial settlement as a frontier region, followed by a phase of more sluggish population increase as a region becomes more settled.

14. Samuel Kernsford, *A History of the Valley of Virginia*, Fourth Edition (Shenandoah, Virginia: Shenandoah Publishing House, 1880), 387.

15 A.C. Bradley, ed. *The Journal of Nicholas Cressey, 1771-1775* (New York: Daedalus Press, 1988). 53. Forthland 54. Deyard Threlkeld, *A Description of Maryland and Virginia*, . . . (Ben C. McCrey, ed. (Gene Arden, Malabar: Edward Brothers, Inc., 1984). 48. Henry Bowden, *The Western Country in 1780: Reports on Newburgh and Virginia*. Martin Taitting and Gedgey Davis, eds. (San Marino: CA: Henry R. Huntington Library, 1984). 121. 25. Martin J.H. Butler, trans., and ed., *Under These Vine and Fig Trees... Travels through America in 1771-1776, 1868, with Some Further Account of Life in New Jersey*, by John Henry's Hannonstein. Volume 14 in the Collection of the New Jersey Historical Society (Elizabeth, NJ: Grassroots Publishing Inc., 1981). 80.

16 Bowden, *Western Country*, 48-49. See also Richard "Five Prospects" 80-88. Mitchell, *Commonwealth and Frontier*, 47-48. Vardie, *Topographical Description*, 14-15, 17-18, 20 provides an even more detailed portrait of the different soil types in the lower valley, though it follows the same outline.

17 Population densities were derived by dividing the total population of each county by the total area. Frederick County was 126 square miles and its population 24,512 ( $24,512/126 = 194$ ). Berkeley County was 700 square miles in 1800 before Jefferson County (228 square miles) was created; the population was 32,806 ( $32,806/700 = 46$ ). For county maps see: Vardie, *Topographical Description*, 4-16, 25 and Joseph Martin, *Compendious Gazetteer of Virginia and the District of Columbia*, . . . (Charlottesville: Mosley & Thompson, 1830). 107. See also Mitchell, *Commonwealth and Frontier*, 181. Mitchell notes that in 1800 the "average densities" of Frederick and Berkeley were "twenty to twenty-five persons" per square mile. However, using his population figures the population density of Frederick would be  $20,120,000/126 = 159$  and Berkeley 20 persons per square mile ( $30,578,700 = 152$ ). Only when the populations of Washington, Frederick Co. (2,126) and Shepherdstown, Berkeley Co. (1,164) in 1800 are removed from the total county population does the overall density fall within Mitchell's range (100). However, he does not specifically note that his densities apply only to rural areas.

18 Toulmin, *Western Country*, 52, 124-125. Reynold, *Travels*, 50. George Washington to Benj. McCrey, November 3, 1777, *Letters and Reminiscences*, 198. Strickland, *Observations on Agriculture*, 14. Stated in American dollars; the prices quoted in sterling and VA currency are: Toulmin, 10-22 to 144-62 per acre. Reynold, 45-66 to 113-34 per acre, Washington, 120-63 per acre. Strickland, 10-17 to 75-43, and 44-38. Butler, *Vine and Fig Tree*, 53, records that a farmer told him in 1770 that land "is ordinarily for 48 doll. . . an acre" in Berkeley. The informant must have been pulling his leg. Newspaper adverts for land indicate that

land values could fluctuate widely depending on improvements and location. For example, Ferdinando Fairfax asked 40 shillings an acre (£5.00) for 500 acres of largely unimproved land lying "near Marlborough" (Gloucester Guardian & Berkeley Advertiser, January 5, 1797). While and Dwell, in contrast, advertised a well improved farm (outward well, buildings of 400 acres in Berkeley county for £14 an acre (*ibid.*, December 24, 1797). See also Mitchell, *Commercialism and Finance*, 34-35.

18 Henry Lee to James Madison, January 5, 1775. Henry Lee, *Personal Papers, 1765-1815*, Library of Virginia, Richmond, Virginia. (hereafter LPP); see also Drew S. McCoy, *The Elusive Republic: Political Economy in Jeffersonian America* (New York: W.W. Norton, 1980; originally published, 1968), 15-16.

19 The "republican syndrome" is best summarized in two articles by Robert E. Shalhope: "Toward a Republican Synthesis: The Emergence of an Understanding of Republicanism in American Historiography," *William and Mary Quarterly*, 3rd Ser., 39 (January 1982), 49-90; and "Republicanism and Early American Historiography," *William and Mary Quarterly*, 3rd Ser., 39 (April 1982), 104-154. Daniel T. Rodgers provides a penetrating critique of this body of work in, "Republicanism: the Career of a Concept," *Journal of American History* 79 (June 1982), 11-50. The central works in the creation of the syndrome are: Caroline E. Spurgeon, *The Eighteenth Century Commonwealth: Studies in the Transmission, Development, and Circumstances of English Liberal Thought from the Revolution of Charles II until the Rise with the Tories and Colonists* (Cambridge: Harvard University Press, 1989); Bernard Bailyn, *The Ideological Origins of the American Revolution* (Cambridge: Harvard University Press, 1967); Gordon S. Wood, "Creation of the American Republic," and J.O.A. Pocock, *The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition* (Princeton: Princeton University Press, 1975).

20 Wood, *Creation of the American Republic*, 102-124, 438-439; see also Wood, "Whitney and Kintley in the American Revolution," *William and Mary Quarterly*, 3rd Ser., 35 (January 1980), 3-38; and T.H. Breen, *The American Colonies...The Struggle for the Great Tobacco Plantations on the Eve of Revolution* (Princeton: Princeton University Press, 1985), 162-180 for the perceived sense of social and moral crisis among the Virginia gentry in the 1770s. The "summers position" in the years before the Revolution has been discussed by John J. McCusker and Russell E. Menard, *The Economy of British America, 1600-1789* (Chapel Hill: University of North Carolina Press, 1985), 277-284; and Breen, "An Empire of Goods: The Anglicization of Colonial America, 1680-1770," *Journal of British Studies* 25 (October 1986), 407-429.

22 Thomas Jefferson, *Notes on the State of Virginia*, William Peden ed. (Chapel Hill: University of North Carolina Press, 1954), 181 ("Query XIX: Manufactures"), Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, 3 Volumes, Edwin Cannan ed. (Chicago: University of Chicago Press, 1976; edition originally published, 1904), 2: 348-359; McCoy, *Slavery*, September 51-49; and Donald Fink, *Adam Smith's Politics: An Essay in Historical-Philosophical Economics* (Cambridge: Cambridge University Press, 1978), 80-82.

23 Jefferson, *Notes*, 183; McCoy, *Slavery*, September 51-55, 121-122; Thomas Paine, *The Spirit of Modern Republicanism: The Moral Virtues of the American Revolution and the Philosophy of Locke* (Chicago: University of Chicago Press, 1966), 181. See also Joyce Appleby, "Dissected Farming and the Agrarian Myth in the Early Republic," *American Historical Review* 81 (Oct. 1985): 832-840; and E.A.J. Johnson, *The Foundations of American Economic Freedom: Government and Enterprise in the Age of Washington* (Minneapolis: University of Minnesota Press, 1973), 73-68.

24 Henry Lee to Richard Henry Lee, [1777], Lee Family Papers, 1742-1795, Alderman Library: University of Virginia, Charlottesville, Virginia (hereafter UVA); Henry Lee to Thomas Stan Lee, September 18, 1780 (quoted in Reptory, *Light-House*, Henry Lee 51).

25 *Ibid.*, 18, 23-24, 77; T. Michael Miller, "An Analysis of Light-House Harry Lee's Personal and Real Estate Transactions," unpublished manuscript, Lloyd House, Alexandria, 1990, 2, 41, 42.

26 Henry Lee to James Madison, March 4, 1780, Lee Personal Papers, LDV.

27 Lee to Washington, April 21, 1780, Lee Family Papers, 1742-1795 UVA; Lee to Madison, September 8, 1780, Madison Papers, LC.

28 Lee to Madison, October 28, 1780, Madison Papers, LC; Lee to Washington, April 21, 1780, Lee Family Papers, UVA; Madison to Lee, "Copy of Remarks on Situation of Great Falls of Potomack, Aug. 1778," *Writings of Madison*, 8: 321-324. See also Madison to Washington, November 5, 1780, and Madison to Lee, November 30, 1780 (*ibid.*, 8: 303, 305-307). Lee is identified as a delinquent share holder in the Potomac Company at the Meeting of the Directors, November 26, 1780. Records of the Potomac Company, Proceedings: 1768-1803, National Parks Service, Record Group 78, National Archives: Washington, DC (hereafter NHA). For a full description of Lee's investments see Miller, "Lee's Personal and Real Estate Transactions." Thomas P. Slaughter, *The Virginia Revolution: Frontier Epilogues to the American Revolution* (New York: Oxford

University Press, 1984), 75-88, 347-358, has noted that Washington, like Lee, clearly sought personal gain by opening the Freedmen to western commerce.

29. Stokely Carmichael, *Discordance*, 4.

30. Jefferson, *Notes*, 174; 30 Jefferson to Washington, March 15, 1784; Julian P. Boyd, ed., *The Papers of Thomas Jefferson*, 22 Volumes to date (Princeton: Princeton University Press, 1950-), 7: 28.

31. Washington to Samuel Chamberlaine, April 5, 1788; John C. Fitzpatrick, ed., *The Writings of George Washington, 1745-1799*, 39 Volumes (Washington: Government Printing Office, 1931-1942), 39: 422; Washington to Alexander Spotswood, February 12, 1788, *ibid.*, 39: 414; Washington to Arthur Young, December 4, 1788, *ibid.*, 39: 189; Washington to James Warren, October 7, 1785, *ibid.*, 39: 289; Washington to Jefferson, March 28, 1784, *ibid.*, 37: 576; and Washington to Benjamin Harrison, October 30, 1784, *ibid.*, 37: 473.

32. The best account of Ramsey's life can be found in Ellis May Turner, *James Ramsey, Pioneer in Bacon, Maryland* (Spartanburg, PA: Missouri Publishing House, 1908). See also Brooke Hamble, *Emulation and Invention* (New York: New York University Press, 1941), 26-43.

33. James Ramsey to Charles Morrow, March 23, 1795; Ramsey to Morrow, January 5, 1791, both in James Ramsey, *Letters to Charles Morrow, 1791-1795* (Lan: Ramsey to Morrow, August 4, 1789; and Ramsey to James McMathen, April 15, 1795, "Letters of James Ramsey, Inventor of the Steamboat," *William and Mary Quarterly*, 2nd Ser., 25 (January 1968), 171; and 26 (July 1968), 20.

34. Wood, "Tolerance and Discontentment in the Making of the Constitution," *Essays on Confederation, Origins of the Constitution and American National Identity*, Richard Beeman, Stephen Emswiler, and Edward C. Carter, eds. (Chapel Hill: University of North Carolina Press, 1987), 77. Wood first noted the contrast between the intellectual ideas of the Revolution and the social setting in which those ideas flourished in "Elitism and Reality," 5-28. For other historians writing in this school, see below.

35. John Locke, *Second Treatise of Government*, Peter Laslett, ed., *Two Treatises of Government* (New York: New American Library, 1963), chap. 2, para. 5, 6, 12; chap. 5, para. 24; chap. 8, paras. 123, 204, 225; chap. 19, para. 212.

36. Clinton Kewster, *Origins of the Republic: The Origins of the American Tradition of Political Liberty* (New York: Harcourt Brace, 1969), 357-404 (quote 358); 271, 275; 280-81; 401 fn. 111; Louis Hartz, *The Liberal Tradition in America* (New York: Harcourt Brace Jovanovich, Inc., 1955), 4, 40-42; 125.

37. Bernard Bailyn, *The Origins of American Politics* (New York: Vintage Books, 1976), 40. The term "neo-Lockean" was coined by Wood, see, Bruce Kraussack, *Republicanism and Revolutionary Radicalism: Political Ideology in Late Eighteenth-Century England and America* (Ithaca: Cornell University Press, 1982), 26.

38. Kraussack, *Republicanism and Revolutionary Radicalism*, 5-14, 33-43; 100-62 discusses the changes in radical metaphors. Other works devoted to this new interpretation include: McCoy, *Elusive Republic: Jacob Applby, Capitalism, and a New Social Order: The Republican Vision of the 1790s* (New York: New York University Press, 1964); Steven Wise, *The Republican Reform: War and the Making of Liberal America, 1790-1800* (Ithaca: Johns Hopkins University Press, 1967); Fungie, *Spirit of Modern Republicanism*; and Wood, *Radicalism of the American Revolution*. The differences between these authors are as interesting as their agreements. To cite just one example, the Federalists remain so centrally in this literature. Applby argues that as their social attitudes Federalists were "classical republicans" (54). In contrast, Kraussack associates Federalists with Lockean liberalism and sees Federalists with classical republican values (80-88). Finally, Fungie asserts that both Federalists and anti-Federalists were committed to a consensual vision of society (26). On the continuity between anti-Federalism and Republicanism in Maryland, Virginia and North Carolina, see Herman R. Rapson, *Chesapeake Politics, 1780-1800* (New York: Columbia University Press, 1978), esp. 394-417.

39. Applby, *Elusive Republic*, 15-23, 35, 36, 67; Fungie, *Modern Republicanism*, 134-135, 137-138. Bailyn lets who coined the term by American revolutionaries "to the distant antecedents of natural rights" though he does not trace them close to Locke, see *Ideological Origins*, 154-55.

40. Wood, *Radicalism*, 236-238 (quote 238); Applby, *Capitalism*, 25-26, 31.

41. McCoy, *Elusive Republic*, 77-84 (quote 78); Fungie, *Modern Republicanism*, 74-76; Kraussack, *Republicanism*, 179-180. On the "industrialism" of American craft workers in the early republic, see David Reedy, "Tools and Work During Early American Industrialization," *Labor History* 30 (Winter 1989), 5-46, esp. 15.

42 *People's Modern Republicans* 98; McCoy, *Elusive Republic*, 60-72-76, 83-86 (quote 75).

43 Johnson, *Economic Foundations*, 79-80.

44 *Fourth Course: A View of the United States of America...* (Philadelphia: William Hall and Winslow Burmann, 1794), 4-5, 20-24, 32, 54-55, 128, 194-95, 312, 348; Johnson, *Economic Foundations* 84-85, 180, 217-218. Alexander Hamilton's attitude towards manufacturing as a matter of dispute among historians. McCoy, *Elusive Republic*, 149-152 (quote 149), sees Hamilton as a defender of manufacturing. In contrast John B. Nelson, "Alexander Hamilton and American Manufacturing: A Reexamination," *Journal of American History* 68 (March 1976): 571-685 argues that Hamilton failed to support the manufacturing interest of the United States and instead devised policies that actively aided the maritime interest and resource markets. See also Nelson, *Liberty and Empire: Political Economy and Policymaking in the New Nation, 1783-1812* (McMasters John Hopkins University Press, 1997), 82-83.

45 *Lee's slaves in 1787*: Schreiner-Yates and Low, 1787 Census, 1-65-2 (180); Winchester's slaves in 1787 (*ibid.*, 2, 1808; Alexander's slave population in 1787 (*ibid.*, 1, 76-77, 1808) and 1800 population: Miller, Schreiner, and Hancham, 1, *vin*; Fairfax's slave population in 1787 Schreiner-Yates and Low, 1787 Census, 3, 1018-1873, 1580 population; Nefferson, Fairfax County, 34; 1800 population: *ibid.*, 154. Loudoun population in 1787: Schreiner-Yates and Low, 1787 Census, 1, 20-64; Reynold Eakin Howe Henry Lee, 125-127, notes that Lee voiced opposition to slavery in his *Memories of the War in the Southern Department of the United States* (Philadelphia: 1838) but argues that this arose not from any moral objection to the institution but from a fear of social disorder. Thus Lee simultaneously called for the protection of slaveholders' property rights.

46 Winchester population in 1787: Schreiner-Yates and Low, 1787 Census, 1, 523-527, 1800 population: Verle, *Topographical Description* 18-23. Verle's source was the 1800 federal census. Frederick population in 1787: Schreiner-Yates and Low, 1787 Census, 1, 498-513, 1580 population; Verle, *Topographical Description*, 4-5. Berkeley population in 1787: Schreiner-Yates and Low, 1787 Census, 1, 1286-1409; Mitchell, *Commercialism and Fronting*, 104. Total population of the five counties in 1787 was 54,127, including 18,353 slaves or 33 percent. Even if one excludes Fairfax county (with the greatest percentage of slavery), the slave population still represented 21 percent of the population in 1787 (83,888 total population; 18,748 slaves).

47 *Virginia Gazette and Alexandria Advertiser*, December 9, 1798; January 27 and February 17, 1791. On the influence of the Revolution on attitudes to slavery, see Warington Jordan, *White Over Black: American Attitudes Toward the Negro, 1680-1812* (Chapel Hill: University of North Carolina Press, 1968), 269-301.

48 *Columbian Mirror and Alexandria Gazette*, April 14, 1791, and May 8, 1796. The officers of the society, elected in 1791, were William Hartshorne (President), George Taylor (Vice President), John Janney (Secretary), and Samuel Clegg (Treasurer). All four men were prominent Alexandria merchants, and Hartshorne and Janney were both Quakers. *Alexander's Advertiser*, August 20, 1790; Miller, *Antislavery and Merchants*, 1: 84, 181-88, 335-2, 374-85, 418. On Quakers as one of the few sources of positive antislavery sentiment in Virginia in the late eighteenth century, see Robert McColey, *Slavery and Jeffersonian Virginia: Second Edition* (Fitham: University of Illinois Press, 1973; originally published 1949), 153-164. Robert Mottrell, *Conservatism and Progress*, 180-86, argues that Germans in the Shenandoah Valley were another group who nearly owned slaves. Little surprise, then, that there was also a Winchester antislavery society (called "The Winchester Society for Promoting the Abolition of Slavery, and the Relief of Free Negroes Unlawfully Held in Bondage") formed in the mid-1790s: see *Columbian Mirror and Alexandria Gazette* (April 18, 1796).

49 *Columbian Mirror and Alexandria Gazette*, May 17, 1796.

50 *Shepherd, Statutes at Large*, 2: 73-79 (passed January 25, 1796).

51 McColey, *Slavery and Jeffersonian Virginia*, 187-412; see also Herbert Aptheker, *American Negro Slave Revolt* (New York: International Publishers, 1934; originally published 1940), 234-236, 235-236, and Boyer Lutz Horn, *Slavery Law*, 120-127. Jordan, *White Over Black*, 375-400. For examples of post-Revolutionary Virginia slave laws, see *Shepherd, Statutes at Large*, 2: 270-80, 300-381, 326. Defense of slavery: *Alexandria Advertiser and Commercial Intelligencer*, March 28, 1803; see also, *Slavery's C: Debt to Commerce*, September 28, 1930. *Calendar of State Papers*, 9: 175. A number of violent altercations involving slaves in northern Virginia went before the colonial public squares. In 1797 a confrontation between a slave paired and a group of slaves in Prince William County left four whites and six slaves dead. Anne Steward, *Twenty-Two Years a Slave, and Forty Years a Freeman*, . . . (New York: Negro Universities Press, 1946; originally published 1846), 38-39. On March 24, 1799 the Alexandria town Council appointed four men to patrol the streets of town on Sundays to "disperse all disorderly meetings of Negroes; boys, or others;" banish "uncontrollable [and] noisy, disturbance, and drunkenness, on the Sabbath;" caused by blacks was

unplanned of five years later. *Alexandria Advertiser*, April 2, 1798; *Alexandria Advertiser and Commercial Intelligence*, March 20, 1803. In March 1803 these slaves being transported from Maryland to Georgia escaped outside of Alexandria, attacked and robbed their masters and left them for dead. *Texas and District of Columbia Daily Advertiser*, March 20, 1802.

58. *Virginia Journal and Alexandria Advertiser*, May 20, 1794. Bulley also recruited Washington to assist in the return of his property; see Washington to Robert Morris, *Writings of Washington*, 35:407-408. Washington censured the Philadelphia "Quaker Society" for its assault on Bulley's "property," and argued that the previous "intruders were eviler than it can ever be" (1804).

59. Jefferson, Notes, "Query XIV" Laws, 138-141. See also Jordan, *White Dove, Black*, 428-451, and Paul Finkelman, "Thomas Jefferson and Slavery: The Myth Goes On," *Virginia Magazine of History and Biography*, 100 (April 1994), 109-226. Audrey Gwendolyn, *Slaves in North America: Origin and Evolution of a World View* (Stanford: Stanford Press, 1969) documents the creation of a "race ideology" in America not a composite of liberal ideas and scientific racism: a body of thought Jefferson played a key role in constructing; see esp. 45-52, 142-146, 150-154. For similar developments in the Lower South see, Joyce E. Chaplin, *An American Paradox: Aristocratic Innovations and Slavery in the Lower South, 1763-1820* (Chapel Hill: University of North Carolina Press, 1997), 15, 30, 150-152.

60. The Alexandria Society met regularly between 1790 and 1801; the last public notice of a meeting appeared in the *Texas and District of Columbia Daily Advertiser*, May 28, 1801. Society member quoted in Jordan, *White Dove, Black*, 480.

61. McClellay, *Slavery and Jeffersonian Virginia*, 114-118 (quote 118) see also, Melvyn Doolittle, "Was Slavery Dying Before the Cotton Gin?" in *Black History: A Bicentennial*, Melvyn Doolittle ed. (New York: Doubleday & Company, 1968): 96-115.

62. Eugene Genovese, *The Political Economy of Slavery: Studies in the Economy and Society of the Slave South*, Second Edition (Middleton, CT: Wesleyan University Press, 1968) originally published, 1949; Eugene Genovese and Elizabeth Folsom Genovese, *Evils of Merchant Capital: Slavery and Economic Property in the Rise and Expansion of Capitalism* (New York: Oxford University Press, 1969), 1-171; Elizabeth Folsom Genovese, *Slaves on the Plantation: From Field to Household, Black and White Women of the Old South* (Chapel Hill: University of North Carolina Press, 1984), 27-66. On household production see also, Ralph V. Anderson and Robert E. Odeman,

"Slaves as Fixed Capital: Slave Labor and Southern Economic Development," *Journal of American History* 64 (June 1971): 24-48. Barbara Fields, *Slavery and Freedom in the Middle Ground: Maryland during the Nineteenth Century* (New Haven: Yale University Press, 1965), 160-62, explicitly endorses Genovese's interpretation of the South. Of course, the Genovese view of the South has not gone unchallenged. For contrary points of view that see slaveholders as entrepreneurs, devoted to the principles of liberal democracy, see Kenneth Stampp, *The American Revolution, Slavery in the Antebellum South* (New York: Vintage Books, 1964), 34, 42-61, 75-78, 222-23, 262-63; Robert W. Fogel and Stanley L. Engerman, *Time on the Cross: The Economics of American Negro Slavery* (New York: W.W. Norton, 1968, originally published 1974), 69-88, pass. 87-88; James Oakes, *The Ruling Race: A History of American Slaveholders* (New York: Vintage Books, 1982), 32-68, 128-171. For a view of the large colored Chesapeake planters as "creative capitalists," who exercised the "practical virtues" of "hard work, shrewd planning, responsible conduct, and an eye to the main chance," see Aubrey C. Land, "Economic Behavior in a Planting Society: The Eighteenth-Century Chesapeake," *Journal of Southern History* 16 (November 1980), 449-68.

51 For Genovese and Genovese, *Marxism and Capital*. 52 For Genovese, *Evolution of Household*, 52-56 (para. 55). For a similar critique of Fox Genovese and Genovese see: Frederick Siegel, "The Paternalist Thesis: Virginia as a Test Case," *Civil War History* 15 (September 1978), 247-249.

53 On the limits to economic development (as opposed to growth) in a slave economy see, Genovese, *Political Economy of Slavery*, 152-175. For a description of economic development (within limits) in antebellum Georgia see: Barbara, "The Village South," *Small Farms, Large Questions*, 226-272. Oakes, *Ruling Race*, 123-130, and Oakes, *Slavery and Freedom: An Interpretation of the Old South* (New York: Alfred A. Knopf, 1969), 40-79. Fred Siegel, *Living in Fitzhugh's County: Virginia's frontier co-existence of entrepreneurial, liberal values and more traditional, paternalistic attitudes, behind the tobacco growers of the region "planter-entrepreneurs"*, see: *The Roots of Southern Discontent: Tobacco and Slavery in Dumfries, Virginia, 1763-1863* (Chapel Hill: University of North Carolina Press, 1957).

54 Lee to Madison, September 8, 1786, Madison Papers, LC. Washington to James Warren, October 7, 1785, *Writings of Washington*, 18: 26-29.

CHAPTER I  
"AN EXCELLENT PART OF THIS COUNTRY FOR RAISING WHEAT":  
FROM TOBACCO TO GRAINS

George Washington's advocacy of northern Virginia certainly enhanced the region's economic growth. Still, the real basis of its prosperity lay in agriculture. Originally devoted to the production of tobacco, by the 1770s the farmers of northern Virginia were increasingly turning to grains. In 1775 Joseph Quincy noted that "the culture of corn and wheat is supplanting very fast that of tobacco in this province." After the Revolution, the change continued apace. In 1800 Alexandria merchant William Hodgson summed up the changes in northern Virginia's agriculture: "The Lands to the Westward of this place," he wrote, "are now converted from Tobacco plantations into Farms--It is in a high State of cultivation. It is the Great Wheat Country in the United States." He noted that though the "culture of Tobe is carried on universally on the Maryland side of the Potomack," production had largely shifted southward, to the "upper parts of North Carolina & Georgia." While some tobacco continued to be cultivated, northern Virginia's days as part of the tobacco kingdom were effectively over by 1800.<sup>1</sup>

The economic transformation of the region lay in the individual decisions of each landowner. Among the first to switch was Washington. As early as 1765 he had contracted with the Alexandria firm of John Carlyle and Robert Adams to purchase all the wheat he produced at Mount Vernon for seven years. Thereafter his production of wheat grew steadily from 257 1/2 bushels in 1765 to 5,241 1/2 bushels in 1769 while the size of his tobacco crop declined from 55,075 pounds in 1765 to 5,000 pounds in 1773. By the end of the Revolutionary War Washington had decided to stop the cultivation of tobacco altogether. In 1784 he had "not an ounce of Tobacco growing," a position which he continued in 1785. In the years that followed Washington resumed planting small crops of tobacco but determined that "no more ground shall be appropriated" to that crop "than what is either naturally very good . . . or which can be made strong by nature of some kind or another." Washington concluded that wheat and flour (ground at two mills on the Mount Vernon estate) were to be his primary staples.<sup>10</sup>

Washington revealed the reason for his decision clearly. First, he was concerned with improving the water-laid lands at Mount Vernon. Virginia had long been infamous for the poor methods of its farmers. The anonymous author of *American Husbandry* decried the agricultural methods of the colony: Crop rotation and manuring, for example, were unknown; the Virginia tobacco planter grew "successive crops" on the same plot of ground

"until the land well produce no more." When they had "exhausted their grounds" planters simply moved westward to more fertile lands. The cause of this neglect was twofold. First, the "planters" and consequent disappearance of land induced Virginians to pay little attention to the maintenance of their fields. Second, the planters gave "all their attention to tobacco," in the process neglecting other improvements. Washington similarly blamed Virginia's (and his own) agricultural problems on "the cultivation of tobacco," which encouraged the "use, and abuse" of holdings: transforming lands which "were originally quite good" into an "exhausted" state. Tobacco cultivated a "regular course of crops," and Washington hoped that a switch to grains would allow him to construct a "regular and systematic course of cropping."<sup>12</sup>

Behind this lament, however, lay economic concerns. In 1754 Washington wrote that whether he would resume tobacco production "will depend altogether upon the price that article is to bear."<sup>13</sup> Though tobacco prices had generally risen between 1750 and 1775, a severe drop in the 1760s and again in 1770 made it a risky proposition. And while tobacco prices in Alexandria dropped from a high of \$4.45 (or 85s) per hundred weight (wt.) in 1770 to a low of \$1.80 (or 35s) in 1772 and 1774, wheat and flour prices in Alexandria rose fairly steadily between 1770 and 1775. Growing demand for grains in Europe and the West Indies drove prices upwards, particularly after the Revolution. In 1772, for example, a bushel

of wheat was valued at .75¢ (or 15¢) per bushel. By 1770, the price had remained .89¢ (or 17¢). Flour rose from \$1.80 (or 180¢) per barrel in 1770 to over \$1.25 (125¢) in 1774. After the Revolution tobacco prices rose dramatically to a high of \$1.80 per 100 lbs. in 1780, but fell to \$5.25 per 100 lbs. in March 1788 before they would remain until 1790, and collapsed to \$2.17 per 100 lbs. by 1791. These low prices ensured that tobacco remained a secondary staple in northern Virginia. In contrast, the price of wheat and flour took off in the 1780s and remained high into the nineteenth century (though with periodic dips). In December 1784 the price of a barrel of flour reached \$5.14 (514¢). Two years later the price averaged \$5 (500¢) per barrel. Thereafter, the price rose as high as \$14 (1400¢) per barrel (in February 1794) and never dropped below \$5.00 or 500¢ (in July 1794) before 1800.<sup>1</sup>

Finally, in the 1780s and 1770s planters such as Washington had increasingly gone into debt. When the price of tobacco was high many planters increased their borrowing and purchases of consumer goods from British merchants. As long as prices remained high this presented few problems. However, a credit collapse in Britain in 1792 and the decline of tobacco prices soon thereafter left many planters deeply in arrears and with no way to defray their bills. Rising debt threatened the planters' vaunted independence, Washington himself was not immune to such pressures. And while a crash in wheat did not immediately end a planter's indebtedness, Washington at least found that the sale of grain covered the "heavy

expenses of my estate"<sup>14</sup> In short, exhausted lands, changes in the value of Virginia's primary export crops, and rising indebtedness induced Washington to switch his staples.

Other planters followed suit. Like Washington, Robert Carter ("the Conscience") began to shift to wheat before the Revolution. In 1712, when he returned from Williamsburg to reside permanently at Nomini Hall in Westmoreland County on the lower northern neck, Carter possessed over 70,000 acres, 10,000 of which was located in Loudoun, Fairfax, and Frederick counties. In the 1730s most of Carter's western lands were undeveloped or leased to tenants but by 1750s his only important plantation east of the fall line was Nomini Hall. Moreover, on his own plantations Carter gradually reduced his cultivation of tobacco while simultaneously increasing his production of grains.

According to his biographer, Louis Morton, a number of factors drove Carter to abandon Virginia's traditional staple. First, tobacco cultivation had encouraged poor agricultural methods that resulted in exhausted lands and increasingly poor crops of tobacco. Such lands, however, still produced plentiful crops of wheat and corn. As one reader noted, "cultivate your lands as much as you will with tobacco, you will leave it in order for grain."<sup>15</sup> Second, erratic tobacco prices, particularly after 1713, led to a decline in the profitability of the crop. As Carter wrote to one of his correspondents in 1770, the

<sup>14</sup> "present appearance of the tobacco trade forbids the making of land

Tobacco." The collapse in tobacco prices in the 1770s forced him to search for a viable alternative and in 1774 Carter attempted to produce hemp and flax. However, the rise in demand for wheat and grain products, first during the Revolution and in the 1780s in Europe and the West Indies, convinced Carter to shift to grains. By 1788, of his thirteen plantations slaves produced grain while on only two was tobacco grown. By the time he emancipated his slaves in 1794, Carter appears to have abandoned completely the cultivation of tobacco.<sup>7</sup>

Even more revealing is the case of George Mason, whose Fairfax County plantation, Gunston Hall, lay south of Mount Vernon on the Potomac. In 1768 he wrote that Virginia planters could end their reliance on British manufactures if they were to "Solicit purchasing Slaves, and raising Tobacco." This would increase the "number of spare Hands to employ in Manufactures" and enable Virginia to weather the Nonimportation Association of that year. Yet if Mason believed this strategy would force Great Britain to repeal the Townshend duties, he did not consider it a sound economic policy for himself. Throughout his life his slave holdings grew, his tobacco slaves in Fairfax County growing from 11 in 1749 to 78 in 1787. Moreover, until near the end of his life Mason remained devoted to tobacco cultivation. Indeed, in May 1775 he shipped 100 hogshead to his British brother William Lee, hoping that the Nonimportation Resolutions, which were to end all American exports to all

September 18 would "tell what Tobacco goes to Market to an amazing Price." After the Revolution he retained his tobacco shipments, shipping 500 hogshead to France in 1791. However, he also began supplementing his tobacco crops with wheat. As early as 1786 the farm of Mason's son George Jr. produced 1200 worth of wheat for export. Mason himself wrote to his son John in 1798 that he planned to charter "a small Ship, to load with Wheat upon Consignment." He noted that such a ship "might be speedily filled up," and that he "could put a considerable Quantity" of wheat on board himself. In 1791 Mason oversaw the production of 2 645 1/2 bushels of wheat for export at his Gunston Hall plantation.<sup>1</sup>

Mason gradually shifted to wheat after he witnessed the collapse of the French market for tobacco in 1790. According to historian Jacob Price, up to 1778 the French Farmers General, the royal tobacco monopoly, had guaranteed Virginia planters a steady market for their tobacco. From 1765 to 1788 Robert Mason's tobacco contract with the Farmers-General for 28 000 hogsheads had kept demand and prices for the staple relatively stable (prices never fell below 85 00 or 90/cent). The end of Mason's contract in 1784, however, and the growing revolutionary turmoil in France (which Mason welcomed) resulted in a collapse of tobacco prices despite a slight recovery in late 1790 due to a short crop in Virginia. Of the greatest consequence to Virginia planters, the end of royal government in France brought a political upheaval on the Farmers-General and disrupted the

French market. When the French revolutionary government dissolved the Farmers-General in 1791 planters in northern Virginia, "dependent on French sales," saw their market disappear. Mason recognized the profound effect changes in France were having on Virginia. In 1793 he wrote to his son John living in France, that "the Confusion in uncertain State of Affairs in France makes People cautious of venturing their Property there." Even more disturbing, "the Progress of the Revolution" led to a drop in "the Price of our great Staple Tobacco."

In the last months of his life Mason became convinced that tobacco cultivation in northern Virginia was at an end. In October 1798 he authored (but did not sign) a petition sent to the General Assembly that asked for a series of changes in the flour inspection law of 1762. More important than the modifications requested, however, were the grounds upon which Mason argued for them. He noted that "the quantity of Wheat made in Virginia particularly in the extensive Country situated upon the Waters of Potomack River" made it likely that "Wheat and Flour will soon become the principal and permanent Staple of that Country." "The best of our Tobacco Lands," he continued, had "already been cut down and exhausted." Moreover, Virginia farmers could not compete with "the more southern States," whose "favourable Climate" had enabled them to produce "large Quantities of Tobacco" that had "overstock'd European Markets."

With exhausted lands, declining prices, poor markets, and formidable southern competition, it was time for a shift in the regional economy.<sup>10</sup>

Wealthy planters such as Worthington, Carter, and Mann indicate the duration of change, but more important still were the thousands of smaller landowners who abandoned tobacco. The export records from the naval district of the South Potomac—of which Alexandria was the primary port—provide the best measure of the economic shift. Prior to the Revolution, as David C. Engerman has demonstrated, grain—corn, wheat and flour—were important components of Virginia's coastal trade. Between 1768 and 1772 Virginia exported annually (including the maritime trade) an average of 686,672 bushels of corn, 104,217 bushels of wheat, and 2,081 tons of shipboard and flour, the equivalent of 30-500 barrels. In addition, some 80,000 hogsheads of tobacco were exported annually, revealing the continued importance of the Virginia's primary staple.<sup>11</sup> In the South Potomac naval district, from which the exports of northern Virginia flowed, some 27,800 bushels of corn, over 7,000 bushels of wheat, and 3,000 barrels of shipboard and flour were exported (including the maritime trade) in 1768. Tobacco, too, was an important export from the region, with some 6,000 hogsheads leaving the district in the same year. Fragmentary records in the early 1770s indicate that the grain trade took off prior to the Revolution. Between October 20, 1773 and January 5, 1774, for example, 47,850 bushels of wheat and 4,520 barrels of flour cleared the South

Potomac naval district. Over a six month period in 1774, 68,288 bushels of wheat, 22,812 bushels of corn, and 7,888 barrels of flour were exported from the district. No comparable export figures for tobacco survive, but assuming that the region continued to supply 50 percent of Virginia's tobacco exports (as it had done throughout the 1760s) then over 4,000 hogsheads were exported in 1774.<sup>12</sup>

Local merchants were astounded by the growth in grain exports.

Henry Paper, an Alexandria tobacco factor working for the Whitehaven firm of Brown & Littlehale, wrote in 1767 of the difficulty in ascertaining the prices of grains "as few of them are to be got here." By late 1770, however, Paper could write that "Wheat & Flour is in great demand here." The demand continued in 1771, Paper noting that "we have a very great push for" wheat, flour and corn in Alexandria. By the end of that year the ready market for these commodities drove the price of a bushel of wheat above 80¢ or 90¢, and a barrel of flour above \$2 15 or 16. "The people," Paper recorded, are "going out of Town before day to meet the Waggon [sic] to buy." He pronounced the buying spree a "Furore," because "many... must suffer" as a result. However, few did. Not until late 1774 did the price of a bushel of wheat drop below 80¢ (and it quickly rebounded) and the price of flour remained above \$2 20 until 1775. At the same time, the price of tobacco more than halved. Paper believed in 1775 that low prices would force "many to leave off" making it [tobacco] in those parts as "Wheat has

kept up very high." Later in the same year he wrote that if without "constraint or such demand Tobacco will soon be at an end here." Demand for grain continued high in 1774; Poyer noted that "a Wagon" arriving in Alexandria "will have half a dozen purchasers after it." In the same year Poyer concluded that what "is now" the "chief dependence" of northern Virginia, having supplanted tobacco as the region's primary staple.<sup>32</sup>

The Revolution effectively ended regular trade from Alexandria until the early 1780s. Although Robert T. How, a prominent Alexandria merchant, managed to ship at least ten ships through the British blockade of Chesapeake Bay in the late 1770s.<sup>33</sup> In 1778 the Virginia legislature, acting on the request of seven merchants and residents established a naval office in Alexandria and appointed Charles Lee the town's first naval officer. He was also appointed naval officer at Timonium, the second port of entry on the Potomac, located at the western end of the northern neck.<sup>34</sup> Records of imports and exports (including the transatlantic trade) date from September 1780. For the first time shipments from Alexandria were recorded separately from the rest of the South Potomac district. Exports remained insignificant until 1783, when trade once more began to flourish. In the final four months of 1788, for example, only 408 hogsheads of tobacco were exported from Alexandria. By 1791, in addition to 1,486 hogsheads of tobacco 2,134 barrels of flour cleared through the port. In 1792 these increased to 1,898 hogsheads of tobacco, 2,535 barrels of flour and 125

barrils of shipboard. By 1765 5,054 bagamens of tobacco, 11,094 barrils of flour, 25 852 bushels of wheat, 29,408 bushels of corn, and 117 barrils of shipboard left Alexandria. These numbers rival clearance from the entire district in 1766, except for a decline in the amount of tobacco exported.<sup>67</sup>

In 1766 exports of flour reached a new high – with over 21,000 barrils leaving the port, in addition, 112 680 bushels of wheat and 431 barrils of shipboard were exported. Surprisingly, no corn cleared from Alexandria in that year, while tobacco exports dropped to 4 627 bagamens. By 1766 Alexandria was booming. Tobacco shipments increased to 7 843 bagamens as prices for that staple hardly ever fell 20 279 barrils of flour, 122 728 bushels of wheat, 42 488 bushels of corn, and 1,111 barrils of shipboard also left the port. It seems clear that by this year Alexandria had regained pre-war levels of commerce and trade. In 1766 tobacco exports soared to 20 498 bagamens (though this represented the post-war peak for the staple). In contrast, shipments of wheat and corn dropped (to 26 419 and 4,436 bushels respectively), while flour and shipboard shipments grew slightly (22,000 barrils total approximately).<sup>68</sup>

Unfortunately, after the first quarter of 1767 the Virginia legislature altered Alexandria's status as a legal port of entry and clearance transferring most of the public operations to the small (and distant) town of Yemassee. The purpose of the move was to prevent smuggling. The more immediate effect was to devastate Alexandria's trade. In the period April 1,

1787 to January 11, 1788, few records exist for the port. Moreover, distances from Yocumans, despite undergoing a substantial rise, indicate that that port did not absorb much of the produce of Virginia farmers west of the river. The Potomac's naval officer, Charles Lee, complained that the new law would drive "trade . . . from the Commonwealth elsewhere." Faced with the option of entering and clearing at Yocumans or at Maryland, Alexandria, merchants, Lee predicted, would "find it in their interests to do their business in Maryland," most likely at Georgetown, the most "convenient" port to Alexandria. The new act would see the "lossage of the Potomack trade . . . almost wholly paid to Maryland." Lee's prediction is borne out in the surviving records. Explaining the lack of returns from Alexandria in the last quarter of 1787, Lee noted "there have not been any clearances from hence" and "of consequence there can be no returns of exports of any kind." He added, however, that the returns from Yocumans would soon be forwarded to Richmond.<sup>12</sup>

Continuing the Alexandria and Yocumans records allows a glimpse of the damage done to the towon trade in 1787 as the produce of northern Virginia was increasingly carried north of the Potomac to Georgetown. While tobacco exports remained surprisingly robust (\$761,494/tonels), flour (\$403) and wheat (11,488 bushels) dropped precipitously. Only corn clearances increased slightly to 13,716 bushels. Still, the drop in Alexandria's shipping in no way reflected a decline in the agricultural

output of the region. In October 1787 when no ships cleared from Alexandria—a group of Merchants and other inhabitants of the Town of Alexandria and the County of Faidah petitioned the Virginia legislature requesting that a more stringent system of flour inspection be established at the port. They justified their request by noting that “manufacturing of Wheat has been for some years past carried to such an extent by the Inhabitants of the Western Counties as to render Flour and Bread Staple Commodities of the State.” However, they continued, Virginia flour “like our other Staple Tobacco” will “never be carried with a Prospect of Success to Foreign Markets unless every Care and Protection is taken to render the Quality of them equal to the Quality of the Flour and Bread shipped from the Neighbouring States.” A well regulated system of inspection, they argued, would secure the competitiveness of the region’s flour. Clearly, though the removal of the naval office injured Alexandria’s trade, in no way did it hinder the region’s farmers in their cultivation of grain.<sup>12</sup>

On February 1, 1788 the naval office was reestablished in Alexandria. Trade, however, did not respond immediately. Returns from the port indicate that though corn and flour clearances rose moderately (to 25,328 bushels and 18,841 barrels respectively), tobacco exports declined (to 5,858 hogsheads) as did wheat (8,808 bushels). Most surprising was the rise in clearances of shipboard to 1,000 barrels. A thriving industry had

taken hold in Alexandria. Returns from 1760 exist only to August, when the new restored government assumed control of export and import functions. These partial records indicate that Alexandria had regained its economic importance in the region. Wheat exports rose to 95,818 bushels, while flour exports rose to 33,344 barrels. Corn exports grew moderately (26,356 bushels) while sugarbush shipments dropped slightly (1,804 barrels). Only tobacco exports dropped significantly, to 3,607 hogsheads, as the region began shifting permanently away from that staple. (See Figure 3-4)<sup>20</sup>

With the resumption of federal control, accounts of exports and shipments continued to track the same fashion through the customs trade was no longer recorded. Charles Lee was appointed the collector of the port, a position he would hold until April 1793 when John Fitzgibbon, a prominent Alexandria merchant, assumed the office. Upon Fitzgibbon's death in 1795, Charles Sumner (an Alexandria lawyer) was appointed to the post.<sup>21</sup> Unfortunately for the historian, the intermediate quarterly reports sent by the collector of each port to the Treasury Department have not survived. All that remains up to 1795 are aggregate records of Virginia exports and the total value of exports from the various Virginia custom houses in each fiscal year (October 1-September 30) between 1760 and 1795. These latter statistics clearly reveal the growth of Alexandria's exports although they fail to catalog the nature of the port's shipping. In the year

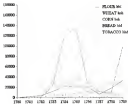


FIGURE 3-4 ALEXANDRIA EXPORTS, 1780-1789

ending September 30, 1791, Alexandria exports were valued at \$360,042.67. By 1795, despite a drop in 1794, shipments were valued at \$528,340.54. In that latter year, Alexandria exports placed it second after Norfolk among Virginia's custom houses, stated differently, Alexandria's share of Virginia's exports rose from 18 percent of the total value in 1794 to 22 percent in 1795. These figures also reveal that Alexandria outdistanced Georgetown in these years. In 1791, Georgetown's exports were valued at \$304,804.43, only slightly less than Alexandria's. By 1795, however, the value of the Maryland port's shipments had dropped to \$186,750.45. By that date, the town of Alexandria had become the primary port of clearance on the Potomac.<sup>22</sup>

Surviving flour inspection records from the port tell a similar tale. The Virginia legislature first established flour inspections in the colony in 1745, in late 1768 the flow of flour and wheat into Alexandria was large enough for the town council to authorize the construction, paid for through public subscription, of the port's first public warehouse for those staples.<sup>23</sup> With the coming of independence the Virginia legislature authorized all existing inspection acts, and in 1785 passed the first inspection law dealing solely with flour (prior to that date inspections also had lumped flour with beef, pork, tan, pitch and turpentine).<sup>24</sup> Since inspection records provide a more comprehensive view of the magnitude of flour production in the region because unlike federal export records they record all flour that left the

state of Virginia, including that involved in the coastwise trade. And though the official records do not survive, the amount of flour imported in many of the years between 1784 and 1803 can be found in a variety of other sources.

In 1784, for example, the total amount of flour imported in Alexandria amounted to some 14,400 barrels. Five years later, over 42,000 barrels were imported, increasing to about 45,000 in 1790 and approximately 60,000 in 1792. Growth continued throughout the early 1790s, rising to an estimated 130,000 barrels of flour imported in 1795. In the next ten years, the number of barrels would not fall below 100,000, peaking in 1803 when over 140,000 barrels were imported. (See Figure 3-12)<sup>17</sup>

In contrast, tobacco inspections fell precipitously. The owners of the original tobacco warehouses in Alexandria, William Hopson and John Dandine, petitioned the Virginia legislature that they be allowed to use a portion of the building as a private warehouse, describing their “inadequacy of storing the quantity of Tobacco brought” to their warehouse “so much reduced every year, that the last years Inspection amounts to but one hundred and forty nine Hogsheds.” The same year the inspectors of the warehouse, Thomas Goddard and Jacob Cox, complained that the amount of tobacco imported in the past year was insufficient to pay their salaries and asked that the legislature make up the difference. Finally, in 1795, noting the “decline more and more every year” in tobacco inspections

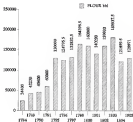


FIGURE 2-9 ALEXANDRIA PLOT INSPECTIONS: 1784-1992

as Alexandria, Beyrout and Dundee requested that the warehouse be discontinued. The Virginia legislature complied with their wishes.<sup>12</sup> Between 1798 and 1800 export records for the port remain sparse. A sample of ship manifests for 1797, 1798 and 1800 submitted to the federal government to substantiate losses suffered in the undeclared naval war with France between 1797 and 1801 have survived.<sup>13</sup> These records provide a partial picture of Alexandria's exports. In 1797, based upon the surviving manifests of seventy ships that cleared the port, 45,421.5 barrels of flour, 64,400.5 barrels of wheat, 5,104 barrels of shipboard, and 1,180.5 barrels of crackers were exported. In contrast, only 1,124 hogsheads of tobacco cleared the port. Also striking was the collapse in wheat exports to 800.5 barrels. Wheat traded in the warm climates of the West Indies and northern Europe (the primary destinations for Virginia's grain), and had to be transported into flour and baked goods. The result was the growth of new industries milling and baking in the region.<sup>14</sup>

In 1798, the surviving records (only four clearances) indicate that flour exports dropped to 20,154.5 barrels, while corn fell to 20,000.5, and shipboard to 2,087 barrels. In contrast, crackers rose to 4,160 barrels while tobacco exports grew to 2,343 hogsheads. The following year, for which seventy manifests survive, exports of most of the region's staples climbed. While flour exports dropped to 20,400.5 barrels, corn clearances increased substantially to 40,070.5 barrels, so did shipboard (8,180.5 barrels, and

tobacco (2,008 kaphandeh). Exports of crackers dropped somewhat to 3,768.5 barrels. Since the surviving records represent slightly over half the average number of annual clearances for the years 1864-1868 (when all manifests of cleared ships survived) and the amount of flour inspected at Alexandria in those years never fell below 120,000 barrels (with the exception of 1700 for which no records could be found) the total exports in the years 1797, 1799 and 1800 were probably twice the amounts recorded in the surviving manifests.<sup>10</sup>

Between 1801 and 1805 commerce thrived in Alexandria. In 1801, 58,186.5 barrels of flour, 18,512 bushels of wheat, 41,528.5 bushels of corn, 4,604 kaphandeh of tobacco, and just under 10,000 barrels of shipboard and crackers cleared the port for foreign destinations. The following year flour exports rose to 71,576 barrels, wheat to 19,865.5 bushels, and shipboard and crackers to more than 10,000 barrels. In contrast, corn exports fell to 18,377 bushels and tobacco to 3,340 kaphandeh. In 1803, despite a yellow fever epidemic which forced many inhabitants to leave the town in the fall, Alexandria experienced its most prosperous year in the quarter century following the Revolution. Flour exports totaled 85,407.5 barrels, wheat 24,900.5 bushels, corn 71,424.5 bushels, and shipboard and crackers almost 20,000 barrels. Even tobacco exports rose slightly to 4,018 kaphandeh. Smaller amounts of rice, rice meal, olive and corn meal also cleared the port. In 1804 and 1805 flour exports hovered between 51,000 and 55,000 barrels

wheat corn dropped from 38,477 S to 18,143 bushels. After its dramatic rise in 1893, wheat shipments fell to 8,000 bushels in 1894, and to none in 1895. In contrast, shipwrecked and crackers topped 33,000 barrels in 1894 and 34,000 barrels the following year. Tobacco exports remained fairly steady, with 4,354 hogheads leaving the port in 1894 and 4,182 in 1895. (See Figure 2a)<sup>28</sup>

As helpful as export records can be in reconstructing northern Virginia's agricultural output—and the new volume on grains, it is important to remember that such shipments represented only a fraction of the total farm production. In addition to the substantial amounts of grain produced by farmers for their own consumption, large amounts of produce traveled from Alexandria to other American ports.<sup>29</sup> Unfortunately, the magnitude of the maritime trade can easily be measured in the surviving records after 1789. Such records exist only in the years 1800 and 1805. In the former year, 48,675 S barrels of flour, approximately 1,950 barrels of shipwrecked and crackers (designated "biscuits"), 37,600 and 6,438 bushels of corn and wheat respectively, and 633 hogheads of tobacco were shipped to American ports. Stated differently, 45 percent of the flour, 35 percent of the corn, 8 percent of the wheat, 7 percent of the bread and crackers, and 34 percent of the tobacco shipped from Alexandria went unrecorded in the foreign manifests. In 1805, 47,836 S barrels of flour, just under 2,000

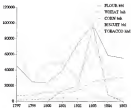


FIGURE 2.3 ALEXANDRIA EXPORTS 1790-1840

bushels of shipboard, 17 400 and 5 800 bushels of corn and wheat, and 400 hophands of tobacco were shipped overseas. These numbers represented 40 percent of the flour, 100 percent of the wheat, 50 percent of the corn, 7 percent of the bread and crackers, and 71 percent of the tobacco shipped to the Aggregate from Alexandria.<sup>11</sup>

The agricultural changes in the region took place, of course, without any substantial change in the composition of the region's labor force.<sup>12</sup>

Slavery remained an important component of the regional economy despite the fact that the region's new primary staples—wheat and grain—were crops that historians have normally associated with family farms and free labor. Indeed, a number of scholars have argued that the labor demands of wheat production made it incompatible with the labor constraints of slavery.

'Slavery,' writes Eugene Genovese, "requires all hands to be occupied at all times." Slaves represented a fixed capital expenditure by the slaveholder. Unlike the employer of free labor who could discharge unwanted employees, each master was burdened with the costs associated with variations in labor demand. When the labor requirements decreased the slaveholder was still required to pay for the slaves' maintenance. Idle slaves might also "prove troublesome if left idle." As a result, slaveholders pursued "lines of economic activity that offered relatively steady employment opportunities."<sup>13</sup>

No crop appears more incompatible with the constraints of slave labor than wheat. Wheat required that the land first be plowed, usually by a

depth of three to four inches, and the seed planted in late summer, generally between August and September. After planting, the land was harrowed once or twice to cover the seed. After the completion of this procedure there was little to do until harvest which occurred in the early summer between the middle of June and the middle of July. However, the farmer had only about ten days to complete the harvest. Wheat needed to be gathered before it became "hard ripe." Grain in the "dough stage"—just prior to complete ripening—was "harvest, plumper, sweeter and whiter," and thus did not suffer so easily as high winds or during rotting. Harvesting at this stage also resulted in a lighter and more valuable flour, and increased the "workableness and mechanical convenience" of the straw—and thus its value—when used as feed. This short harvest period placed great demands on the labor supply. John Smith, although he owned fifteen slaves, "depended on hiring people to harvest" to get in the wheat he grew on his Montgomery County, Maryland farm. He found, however, that large crops throughout the county in 1774 made the hiring of laborers impossible. Only a number of innovations in his farming methods enabled him to harvest 252 acres with his available slave labor.<sup>10</sup> Wheat, then, created a need for labor in "concentrated applications." The combination of slavery and wheat culture, historian Charles Eklund has argued, made for an "unhappy marriage"; slavery could not adapt to the variable labor demands of the new staple.<sup>11</sup>

Yet if slavery was on the decline in Maryland thanks to the rise in wheat cultivation, that was not the case south of the Potomac.<sup>17</sup> The question, then, is how did slaveowners in northern Virginia adapt their labor supply to the new staple. A number of adjustments could occur on the labor side of the equation. Slaveowners could manumit their slaves and replace them with free labor. In the wake of the Revolution manumissions occurred more frequently than at any period before the Civil War. In Virginia the free slave population increased from 3,000 to 20,000 between 1780 and 1840. However, as Robert McClellan has argued, manumissions were infrequent as legal, the vast majority of slaveholders bequeathing their slaves to their children. And if the free black population rose rapidly, it was still eclipsed by Virginia's slave population which rose over 60 percent between 1780 and 1810 from 258,000 to 400,000. Moreover, in 1800 Virginia lawmakers strongly curtailed the legal ability of slaveholders to manumit their human property. If the Revolution "resulted in a more lenient attitude" to manumission, it was a brief moment indeed.<sup>18</sup>

Another option for securing enough slave labor "selling slaves to the Deep South and Southwest" was not feasible in this period. Through El Whitney created the cotton gin in 1793, and there was extensive migration to Kentucky and Tennessee after the Revolution, not until the close of the international slave trade in 1808 did the demand for Virginia's slaves in the cotton South increase.<sup>19</sup>

There was, however, one other class: Slaveholders could and did hire out *their* hands. Though many contemporaries deplored the practice, there is evidence that it was extremely widespread throughout the South.<sup>12</sup> One study of Elizabeth City County, Virginia (a southern Chesapeake county in which approximately half the population was slave), argues that the slave hiring "was pervasive" between 1780 and 1818, with perhaps 90 percent of taxpayers "involved" either as hirers or hirsers, in the hire of slaves.<sup>13</sup> In this county—which abandoned tobacco for corn and livestock in the late eighteenth century, hiring "introduced flexibility in allocating workers in a diversified rural economy."<sup>14</sup> Other studies of Virginia in this period have also found considerable hiring of slaves. The practice could furnish "a reasonable living," especially for those slaveholders (such as widows, spinsters, minors, or professionals) many who were unable or unwilling to run their own plantations. Slave hiring appears to have been particularly prevalent after the Revolution when a surplus supply of slaves developed as many planters "switched to general farming and wheat growing" and hired out slaves they could not profitably employ.<sup>15</sup>

In northern Virginia slave hiring also appears to have been widely practiced. Even a cursory glance at the local newspapers reveals that considerable slave hiring occurred in the region. Both those seeking to hire slaves and those with slaves for hire advertised in the newspapers, and these reveal the wide variety of jobs which blacks performed. Slaves were

hired for agricultural work by plantation owners, for industrial work by iron manufacturers and forge owners, by tavernkeepers and owners of coffee houses for various jobs, and to work as personal and domestic servants. The labor needs of the region, from wood cutters to wet miners, could be supplied from this source.<sup>45</sup>

Perhaps the largest employer of hired slave labor in the region, however, were the transportation improvement companies. Despite Washington's opposition to the use of slave labor, the Potomac Company, as early as 1788, advertised for "One Hundred Negroes . . . good and able working hands," for work on the Potomac River. The company promised to pay £10 Virginia currency (\$25.00) per year for each slave, in addition to clothing them, paying their levies, and furnishing them with food—one pound of salt pork and feed each day, "a sufficient quantity of bread" and "a reasonable quantity of spirits when necessary."<sup>46</sup>

The company's decision to rely upon slave labor instead of free whites or indentured servants lay in the difficulty both in procuring and controlling white laborers. In May 1788 the directors authorized the hiring of 100 free white laborers, but had trouble filling the positions. George Gilpin, one of the directors, after scouring Berkeley County for laborers in July wrote in dismay to Washington that only "one old ditchman who came very drunk" thought enough of the company's terms to sign on. He surmised, however, that "more did not appear" because "their harvest [of wheat] is great and all

the laborers employed [sic]" Moreover when workers could be hired the company found them extremely "irregular and disorderly in their Behaviour." According to the superintendent, James Bennett, the laborers regularly complained that they did not get paid their "money as soon as it is Due." "Every time that they get a Little Drunk," as observed Bennett wrote, "I am moved and alarmed about their money," and "I am Obliged to take Overseer." He found that "Such frequent mistakes" would "be attended with bad Consequences."<sup>18</sup>

Faced with this unruly labor force the company, in September 1793 authorized the "purchase [of] sixty servants" in Baltimore and Philadelphia "for the use of the \_\_\_\_\_ Company" hoping that they would provide a more pliant source of manpower. Still, the company's labor troubles continued. In January 1798 the *Alexandria* newspaper reported that several of the "Servants who had been purchased" by the company had "run away, but being soon after apprehended were sentenced to have their Heads and Eyes open shamed." Even this measure did not work, between April 18 and November 18 the company placed advertisements for fifty-five individual runaway indentured servants. Little wonder then, that in 1798, the company once more resorted to slave labor, advertising to have 100 slaves for the coming year.<sup>19</sup>

Similarly the Little River Turnpike Company, which built the first private turnpike in Virginia from Alexandria to the head of the Little River

in Loudoun County, relied heavily on hired slave labor. Though the corporation, not the company, allowed it to employ for up to six days a year indentured (males over 18 subject to taxation) working within slave miles of the road, once construction moved beyond the town of Alexandria the company found itself faced with labor shortages. Consequently, in late 1803 when construction had proceeded some four miles from Alexandria, Richard Radeffelt, one of the contractors hired by the company, advertised for hired slaves. He promised "good usage to, and punctual payment for their services," and requested that those with slaves to hire "give the earliest notice to the subscriber."<sup>45</sup>

If slave hiring provided many shareholders with a means of increasing the flexibility and profitability of their labor force, there were nevertheless other solutions to the economic incompatibility of wheat farming and slavery. Farmers could, and did, grow supplemental crops. In northern Virginia, as the export records demonstrate, wheat cultivation never entirely disappeared.<sup>46</sup> Still more important, farmers throughout the region produced large amounts of Indian corn for both foreign and home consumption. Though derided by William Strickland as a crop that, in combination with tobacco, had "ruined the soil" of Virginia, others such as John Taylor of Caroline defended corn. Indeed, Taylor labeled it the "national subsistence," which in comparison to wheat provided larger crops, more manure, and more fodder. More to the point, corn required a far more

extensive use of labor. While at no time did corn cultivation demand the kind of concentrated labor of the wheat harvest, it placed extensive and prolonged labor demands on an agricultural work force.<sup>42</sup>

Though methods of corn planting differed throughout Virginia, the crop was generally planted in April or May and ripened by September. In the colonial period farmers planted corn using the "hoe and hill method" in which the seed was planted in hills, which were subsequently "hilled up" when the stalk was half grown. By the late-colonial period more farmers prepared the soil for the seed by plowing, though the hoe was still widely used for cultivation. In general, between planting and July, corn required weeding approximately three times to remove weeds and grass from around the plants. In addition, throughout Virginia, pulling fodder—that is, removing tender leaves from the plant while they remained green and taking them for use as feed for livestock—was widely practiced. Many farmers also cut off the tops of the plant above the highest ear and used these for fodder. After July—at the same time that wheat was harvested—the corn crop was "laid by." Labor demands increased in the fall when the corn was harvested, shucked and shelled. However, unlike wheat, ripened corn in the husk could stand in the field without damage until the next spring, and thus these tasks could be extended throughout the winter.<sup>43</sup>

Clearly corn cultivation could easily be mixed with wheat to keep a slave labor force busy for most of the year. And motivated by the requests

appropriate output, it appears that most farmers raised both crops. And there were still other means of keeping the slave labor force busy. Taylor lamented the fact that many Virginia farmers stuck to the old "three shift system" of crop rotation: corn planted in the first year, wheat in the second, and in the third year the land was left fallow and livestock allowed to graze on it. He concluded that this system of agriculture, widely practiced in grain-producing regions of the state, "in theory . . . promises to fill our lands in practice . . . fulfill its promise." Despite its obvious problems Taylor realized that farmers continued with the practice because they believed more sophisticated systems of rotation would leave them with a idle work force. On its face, utilizing the land more frequently appeared to employ greater numbers of laborers. Nonetheless, Taylor argued, a properly implemented four field system, one in which land lying fallow was well manured and planted with clover, assured full employment. "The raising of manure, sowing with clover every spot of land which will bear it, and converting all waste land into meadow," he wrote "would alone" ensure the full employment for slaves on "a broad staff farm."<sup>10</sup> Thus, agricultural improvement—the employment of more sophisticated methods of crop rotation, manuring, planting, and labor management—could help ensure the compatibility of grain and slavery.<sup>11</sup>

For Taylor, like so many of his counterparts in northern Virginia, the shift in staples from tobacco to wheat, did not represent a threat but an

opportunity. Demonstrating a flexibility which modern historians have rarely recognized, they responded to the changing demands of the national and international markets, largely abandoning Virginia's traditional staple without relinquishing the Old Dominion's primary labor supply. Still, if the use of slaves remained a constant in Virginia's agricultural life, wheat-with its particular transportation and manufacturing demands (and opportunities)-did in certain a series of changes in the regional economy that altered it profoundly in the years after the Revolution. More importantly, these changes-most pronounced in the years following the close of the war-came to be linked with the Revolution itself. It was the Revolution, Americans believed, that provided the opportunity to respond to market changes without worrying about the stifling hand of Britain's imperial regulations. And it was the Revolution that left Americans free to follow the implications of their new found economic and commercial freedom.

#### Notes

- 1 "The Journal of Joseph Quincy, June 1713" *Manassasville Historical Society Proceedings* 49 (October 1913-June 1944): 987. William Hodgson to Samuel Thompson, October 4, 1820, William Hodgson Letterbook, 1800-1820, Library of Virginia-Beineck Library, Virginia (hereafter LCV). On the shift in the Chesapeake's agriculture see also Lewis Gomp, *History of Agriculture in the Southern United States to 1860*, 2 Volumes (Chapel Hill, N.C.: Peter Smith, 1948; originally published 1928); 2, 408-409. Avery Craven, *Soil, Education, and a Factor in the Agricultural History of Virginia and Maryland, 1606-1862* (Urbana: University of Illinois Press, 1938), 64-164. David C. Klingeman, "Colonial Virginia's Coalfields and Iron Trade," Ph.D. Dissertation, University of Virginia (1971); also, "The Significance of

Great in the Development of the Tobacco Colony," *Journal of Economic History* 26 (June 1966): 364-376. For a V.S. Glover, "The Atlantic Economy and Colonial Maryland: Eastern Shores," *From Tidewater to Wheat* (Johns Hopkins University Press, 1993) 165-80. Quota in the Chesapeake tobacco colonies: Martin and Alexandra Capette, November 12, 1776.

2 Paul Leland Haworth, *George Washington: Father, Brother, an Account of his Home Life and Agricultural Activities* (Philadelphia: Golden-Monial Company, 1915), 65, 66-68. Washington to William Wirt, July 27, 1784. John C. Fitzpatrick, ed., *The Writings of George Washington from the Original Manuscript Sources, 1745-1799*, 38 Volumes (Washington Government Printing Office, 1964-1966), 37-380. Washington to George William Fairfax, June 30, 1785, *ibid.*, 39-140. Washington to George Augustine Washington, March 31, 1785, *ibid.*, 38-204-207. See also Washington to Wirt, October 28, 1773, and Washington to Seneca Harvey, August 15, 1784, *ibid.*, 37-373, 443. On Washington's poor milling run, for example, Washington to John Green, March 13, 1784, and Washington to James McHenry, October 28, 1781, *Letters and Recollections of George Washington* (New York: Doubleday, Page & Company, 1908) 180-182.

3 Henry J. Carson, ed., *American Handbooks*, (Port Washington, NY: Kennikat Press, 1994, originally published 1776) 184-185, 187-190. Washington to Arthur Seneca, November 2, 1781. *Letters from the Excellency George Washington to Arthur Young, and Sir John Sinclair, Concerning an Account of his Handbooks* (Alexandria: Gibson and Stewart, 1800) 12-12; see also Washington to Seneca, August 8, 1780, *ibid.*, 3. Carson, *Soil Enhancement*, 11-45. In the 1770s William Stuckland also mentioned the farming methods of Virginia's indentureds. He argued that the culture of tobacco and corn was at least partially responsible for Virginia's exhausted lands see, *Observations on the Agriculture of the United States of America* (London: W. Bulmer and Co. 1801), 45-52. For a history view based on Prince George County, MD, see Edward C. Papenfuss, "Planter Behavior and Economic Opportunity in a Staple Economy," *Agricultural History* 41 (April 1972): 297-313.

4 Washington to William Wirt, July 27, 1784, *Writings of Washington*, 37-409.

5 Alexandria commodity prices are taken from various sources (see Appendix 1 for details). For tobacco prices in 1775, see Allan Kulikoff, *Tobacco and Slaves: The Development of Southern Culture in the Chesapeake, 1680-1860* (Chapel Hill: University of North Carolina Press, 1982) 40-118. John J. McCusker and Russell R. Menard, *The Economy of British America, 1607-1789: Needs and Opportunities for Study* (Chapel Hill: University of North Carolina Press, 1985) 121. Clarence Irving

Remsey, 180-83) argues that while tobacco and grain prices rose in the period before the Revolution, tobacco prices were much more volatile. In contrast, "where's prices tended to hold up longer and fall less," making it "a better short-term investment crop" (181-182). In the 1780s tobacco prices in the Alexandria market (and throughout Virginia) remained unpredictable.

6 E.H. Rieu, *Tobacco Culture: The Monoculture of the Great Tobacco Planters on the Eve of Revolution* (Princeton: Princeton University Press, 1989), 147-150, 170-193; Robbins, *Tobacco and Slavery*, 110-121; Remsey 11, 89-90. "The Rise and Decline of the Virginia Agriculture in the Eighteenth Century: The Tobacco," *The Old Dominion: Essays for Thomas Perkins Alexander* (Barrett Lectures at Charlottesville: The University Press of Virginia, 1964), 18-19. Washington to William Farrow, February 22, 1794, *Writings of Washington*, 50: 217. In 1790 Washington lamented that "the expensive manner in which I live . . . the bad years of late, and my consequent short crops have constrained me to run on debt." Clearly, a switch to grain did not by itself guarantee financial success: Washington to David Stuart, December 2, 1794 (*ibid.*), 50: 148.

7 Lewis Mumton, Robert Carter of Nomans Hall, *A Virginia Tobacco Planter in the Eighteenth Century* (Williamsburg, VA: Colonial Williamsburg Incorporated, 1944), 62-67, 120-249; *Carter's American Husbandry*, 147; see also Owens (Bill Robertson) 87-88. Carter's plan to free his slaves beginning in 1791 is described, pp. 241-289, though Mumton concludes that a "great many" of Carter's slaves "may never have obtained their freedom" (249). Carter's youngest son, George (b. 1777), considered one of his father's estates in Loudoun County (along w. Orange), there producing wheat and grain with slave labor, which he transported down Great Creek to the Potomac River and the Alexandria market.

8 "The Letter of Vetus," Number 31," Robert A. Rutland, ed., *The Papers of George Mason*, 1136-1139, 3 Volumes (Chapel Hill: University of North Carolina Press, 1970), 1: 108. On Mason's slave holdings, 1748 (*ibid.* 1: 471-472) Note Schenck to Vetus and Plummer Spotswood Leno; *The 1382 Census of Virginia*, . . . 3 Volumes (Springfield, VA: Groundwork Studies in Print, 1997) 3: 1808. Mason to William Lee, May 26, June 1, July 12, 1779, *Papers of Mason*, 3: 238 (quote), 239-237, 248; William Lee to Mason, July 12 and 29, 1779 (*ibid.* 3: 248, 242-244; Mason to John Mason, December 29, 1780, April 26, 28, December 4, 9, 1790 (*ibid.* 3: 1120 (quote), 1227, 1228, 1249, 1251, 1240; Mason to George Mason, Jr., January 9, 1792, (*ibid.* 3: 722).

9 Jacob Price, *France and the Chesapeake: A History of the French Tobacco Monopoly, 1724-1773, and Its Relationship to the British and American Tobacco Trades*, 2 Volumes (San Anis: University of Michigan Press, 1972), 2: 729-942; see also Elizabeth Fox-Genovese and Eugene D.

Gregerson, "Merchant Capital and State Power: Jacob Price on the Tobacco Trade and Its Political Consequences," *Trade of Merchant-Capitalism* (New York: Oxford University Press, 1983), 41-56, and Clements, *Achieving Economy*, 113-119. Memo to John Mason, May 20, July 26, 1790, *Papers of Mason*, 3, 1159, 1304.

10 October 18, 1791, *Alexandria City Legislative Petition*, 1791b, 180a, LCV. Robert Ballard notes that the petition is in Mason's hand and reflected Mason's belief that "tobacco growing was no longer profitable." *Papers of Mason*, 3, 1594. On the exportation of tobacco production into the deep South and West in this period, see Gray, *Agriculture in Virginia, U.S.*, 3, 498-500, 762-766; Harter, B. Rutman and Ann H. Rutman, "The Village South," *Small Farms, Large Questions: Experiences in Early American Social History* (Charlottesville: University Press of Virginia, 1989), 343; and Jovan B. Orphan, *An Agrarian Past: Agricultural Innovation and Modernity in the Lower South, 1700-1815* (Chapel Hill: University of North Carolina Press, 1989), 290-363.

11 Elapamont, "Virginia's Customs and Grain Trade," 300-387. See also James F. Shephard, "Customs Reports from British North American Colonies to Overseas Agents, 1768-1772: Magnitudes and Patterns of Trade," *Experiences in Economic History*, 8 (Fall 1979), tables 1-4, pages 39-49, who details reports from the colony of Virginia including the maritime trade between 1768 and 1772. In the following table derived from his figures, corn and wheat are recorded in bushels; flour is recorded in barrels (including a small amount of husked); and tobacco is recorded in hogsheads. Shephard recorded barrel and flour in ton totals in barrels have been reached by multiplying his figures by 2,240 (1 ton = 2,240) and dividing by 105 (1 barrel of flour = 105 lbs). He recorded tobacco in hundredweights (cwt); totals in hogsheads have been reached by dividing total pounds by 1800, the approximate average weight of tobacco hogsheads leaving the district of the South Potomac in this period; see Thomas M. Powers, "Eighteenth-Century Alexandria, Virginia, before the Revolution, 1748-1771," Ph.D. Dissertation, College of William and Mary, 1977, 65.

	1768	1769	1770	1771	1772	1773
Corn	902148	490809	268904	435347	365649	402385
Wheat	530058	304853	267300	147666	47368	185735
Flour	22852	34485	28142	32794	29005	28016
Tobacco	42634	54087	66521	47879	47648	55628

10. Prosser, "Eighteenth Century Alexandria," 48-76, 123-124. The 4,000 bushels of tobacco is based on Shephard's tobacco reports for 1772, see note 11. See also, Prosser, "Alexandria and the Evolution of the Northern Virginia Economy, 1740-1776," *Virginia Magazine of History and Biography* 89 (July 1983), 288-299.

11. Henry Piper to Dumas & Littlefield, October 14, 1767; Piper to same, December 11, 1770; Piper to same, November 27, 1771; Piper to same, June 11, 1772; Piper to Samuel Martin, April 11, 1774; and Piper to Dumas & Littlefield, May 23, 1774, all in Henry Piper letterbooks, July 26, 1767-December 8, 1776, University of Virginia, Charlottesville; Virginia Governor 1773-9. For price data see Appendix 1.

14. Nan Northerton, Donald Sweng, James Astorson, *Essex County, Virginia: A History* (Furber, Furber County Board of Supervisors, 1979), 126.

15. W. W. Henshaw, ed., *The Statutes at Large, Being a Collection of all the Laws of Virginia, from the . . . Year 1619 to 1920* (Richmond, New York, and Philadelphia: 1920-1923), 12: 365 (October 16, 1776; Alexandria Legislative Petition; LGV registered as "Naval Office on the Potomac") *William and Mary Quarterly: Third Ser.*, 3 (October 1946): 354, 355.

16. Entry and Clearance, 1760-1765, District of South Potomac, Port of Alexandria; and Entry and Clearance, 1764-1766, District of South Potomac, Port of Alexandria, *Statute of Public Accounts*, LGV. These records consist of quarterly reports of all entries and clearances (including the customs trade) prepared by the state appointed naval officers of each port.

17. Entry and Clearance, 1760-1765, District of South Potomac, Port of Alexandria; and Entry and Clearance, 1765-1766, District of South Potomac, Port of Alexandria, *Statute of Public Accounts*, LGV. The run in tobacco exports prompted a group of over 200 sons, merchants and planters in 1746 to request the creation of a second tobacco warehouse in the town. Since the end of the war they argued, the "increase of the Trade of Tobacco in Alexandria" had resulted in a "greatly increased" population in town. However, there was much opposition to the plan. A second petition, signed by 284 individuals, argued that only "thirteen hundred" bushels had been brought to town each year since the end of the war, and that amount did not justify the added expense of a second warehouse. Though the Virginia legislature rejected the 1746 petition, in 1761 when four more petitions in support of the new warehouse had been received, a new petition was established in Alexandria. See December 15, 1746 (two petitions in favor) and one opposed; November 20, 1766 (in favor), and November 20, 1767

free porters in South Alexandria Legislative Porters. *LOW*, *History, Statistics at Large*, 12: 580-581. By 1795, however, Alexandria's original tobacco inspectors was discontinued at the request of its owners. See below.

12 "An act to amend the act, intitled An act to restrict foreign vessels to certain ports within this Commonwealth." *History, Statistics at Large*, 12: 320-323. The statute was repealed in January 1795; see *ibid.*, 12: 424-428. Charles Lee to Governor [Richard] Randolph, February 18, 1791 in William F. Palmer, ed., *Calendar of Virginia State Papers*, 11 Volume (Richmond, 1875-1893), 4: 245. Lee to Randolph, January 31, 1795. *Entry and Clearance, 1765-1795, District of South Potomac, Port of Alexandria, Auditor of Public Accounts, LOW*.

13 *Entry and Clearance, 1765-1795, District of South Potomac, Port of Alexandria*; and *Entry and Clearance, 1765-1795, District of South Potomac, Port of Yamacraw, Auditor of Public Accounts, LOW*; October 27, 1785, *Frederick County Legislative Porters, 1778-1805, LOW*, reprinted as "Inspection of Whist," *William and Mary Quarterly*, 2nd Ser., 2 (October 1905): 284-290. It was signed by 51 individuals among whom were many of Alexandria's foremost merchants. The legislature responded favorably to the petition establishing new four inspection warehouses throughout the state, outlining new grades of four inspection, fine middling, and cheaply specifying the rate, construction and capacity of four barrels, the duties and responsibilities of millers and the inspectors, and penalties for noncompliance; see *History, Statistics at Large*, 12: 515-520.

14 *Entry and Clearance, 1765-1795, District of South Potomac, Port of Alexandria*; and *Entry and Clearance (Ons and Downs), 1765-1785, District of South Potomac, Port of Alexandria, Auditor of Public Accounts, LOW*. The Tariff Act of July 4, 1790 empowered the federal government to begin taxing imports to and exports from all American ports as of August 1, 1790; see Arthur O. Shreve, "Commerce of Virginia, 1789-1791," *William and Mary Quarterly*, 2nd Ser., 18 (October 1961): 365.

15 On Lee's appointment see R.H. Lee to Charles Lee, June 7, 1788, James Carter, ed., *Letters of Richard Henry Lee*, 2 Volumes (New York: MacMillan Company, 1904), 2: 465; and George Washington to Richard Henry Lee, August 1, 1789, *Writings of Washington*, 36: 369. On Fitzpatrick's and Brown's appointments see Charles Lee to Washington, April 4, 1790, Charles Lee Papers, Virginia Historical Society, Richmond; Virginia Quarterly 1789; and Alexandria, Virginia Letters Received, 1789-1800; Bureau of Customs, Record Group 56, National Archives, Washington D.C. (November 89).

22 "Value of Exports for Five Years, Ending September, 1766," *American State Papers, Documents, Legislation, and Executive, of the Congress of the United States: Class IV: Commerce and Navigation, 1792-1825*, 3 Volumes (Washington: Gale and Sonnet, 1826), 1: 321. The total value in each year for the port of Alexandria were as follows: 1763-1764 \$343,242-47; 1764-1765 \$635,583-54; 1765-1766 \$612,848-60; 1766-1767 \$608,440-85; and 1767-1768 \$818,468-54. The port of Alexandria, Port of William County, located on the Potomac to the south of Alexandria, also possessed a federal customhouse in this period and was so early void. In 1762, reports from that port were valued at \$78,885, and though reports rose to a high of \$138,739-50 in 1763, by 1768 the value of its shipments had fallen to \$62,099. In the same year, Yonkinson had reports valued at only \$12,148. See also: Peterson, "Commerce of Virginia," 308-309; and *ibid.*, "The Alexandria Market Prior to the Civil War," *William and Mary Quarterly*, 2nd Ser., 12 (April 1955): 124-126.

23 *Herring Statistics at Large*, 5: 356-357 (subsequent inspection laws were passed in 1785 and 1778-1800); see *ibid.*, 4: 348, 518-519; and 6: 359. See also: Professor "Eighteenth-Century Alexandria," 104-105, 109; and James Donald Mason, "From Empire to Commonwealth: Alexandria, Virginia, 1745-1798," Ph.D. Dissertation, University of Maryland, 1984, 145.

24 *Herring Statistics at Large*, 30: 400-406 (1791) further these inspection acts can be found in *ibid.*, 12: 515-520 (1787); and 12: 527-534 (1793). The inspection laws passed after this date for 1793, 1795, and 1799 made only minor changes in the inspection of flour; see Norton B. Jones, "Wright's Measures, and Mercantilism: The Inspection of Exports in Virginia, 1743-1800," in *The Old Dominion*, 129-130.

25 Sources by year for the preceding paragraph and Figure 1 are as follows: 1764 and 1764, October 18, 1765: *Alexandria Legislative Petitions*, LON; 1766-1769: *Maryland Journal and Baltimore Advertiser*, October 25, 1766; 1768: December 18, 1767: *Alexandria Legislative Petitions*, LON; 1769: *Alexandria Advertiser*, August 12, 1769; 1769: *ibid.*, August 12, 1769; and January 1, 1769: 1769: *ibid.*, April 3, 1769; and *Alexandria Advertiser and District of Columbia Daily Advertiser*, June 26, 1770; 1780: *Alexandria Advertiser and Commercial Intelligence*, January 1, 1803; 1801: *Times and District of Columbia Daily Advertiser*, April 3, and August 4, 1800; and *Alexandria Advertiser and Commercial Intelligence*, November 12, 1801; and August 4, 1802; 1802: *ibid.*, August 4, and November 2, 1802; 1803: *Alexandria Expresser*, May 1, 1803; and *Alexandria Advertiser and Commercial Intelligence*, August 6, 1803; 1804: *Alexandria Daily Advertiser*, March 15, 1804; and *Alexandria Expresser*, September 18, and December 24, 1804; 1805: *ibid.*, March 23, and September 15, 1805; and *Alexandria Daily Advertiser*, July 28, and December 12, 1805. The

following years are estimates based on incomplete information. 1760-1769  
1770-1800 1800-1804 Totals were derived by comparing monthly averages  
from surviving records: in all estimated years except 1780 and 1800 the  
number of barrels captured in six or more months was known.

20. October 20, 1760 (Hepburn and Dundas) November 3, 1760  
Gaulthier and Coq; and November 14, 1760, Alexandria Legislative  
Petition: LON. In the latter petition Hepburn and Dundas attached an  
affidavit from Gaulthier and Coq declaring that in the year ending August 10,  
1764 only 210 hogsheads were imported, falling to 180 hogsheads the  
following year. The legislature discontinued the Alexandria warehouse in  
December 1766; see Samuel Sharpshank, ed. *The Statutes at Large of  
Virginia..... 3 Volumes* (New York: AMS Press, 1879; originally published  
Richmond, 1833), 1: 404. In 1765 the tobacco inspection at Beaufort was  
also terminated; see, *ibid.*, 1: 394. In 1769 the Alexandria inspection was  
reverted to *ibid.*, 2: 184 but a year later the new inspectors John Smith  
and Allen Davis complained that their salaries were too low, and that if not  
raised "a discontinuation of the Inspection must be the Consequence." The  
assembly accepted the pay raise, and on state records ceased the Alexandria  
inspection beyond the year ending September 1800 when 200 hogsheads  
were shipped. See, December 11, 1800 Alexandria Legislative Petition,  
LON; and "The Commonwealth of Virginia in Debt with the Alexandria  
Inspectors," September 18, 1801 Alexandria 1760-1800, Tobacco and Flour  
Inspection, General Records, Public Justice Records, LON.

21. In 1846 the federal government passed a law which allowed boats  
of those who lost ships and cargoes in the canal war with France to collect  
compensation. The wrecks were collected to validate such claims. See:  
"An act to provide for the reimbursement of claims of American citizens for  
speculations contracted by the French prior to the thirty-first day of July,  
eighteen hundred and one," in *The Statutes at Large of the United States of  
America..... 46 Volumes* (Washington: Government Printing Office, 1902),  
33: 350-351. See also McCaughy Family Papers 1760-1824, UNL. The  
sloop of Captain John McCaughy, an Alexandria ship captain whose ship  
The Polly & Nancy was captured by the French along with its cargo and  
crew in 1797, used to win compensation under the act.

22. French Speculation Claims Alexandria Virginia: Outward Foreign  
Memoranda, 1793 Bureau of the Customs, Record Group 50 NIA. On the  
disruption of wheat in wheat chambers, see, Darville Harris and Ronald  
Hoffman, "Single Crops and Urban Development in the Eighteenth Century  
South," *Perspectives in American History* 10 (1976): 55.

19. *French Spedition Chasse*. Alexandria, Virginia, Outward Foreign Mails, 1796, 1808. *Bureau of the Customs*. Record Group 56, NA. Between 1801 and 1808 an average of 138 ships cleared each year, ranging from a high of 143 in 1805 to a low of eighty-seven in 1801; see *Alexandria, Virginia: Outward Foreign Mails*, 1801-1805. *Bureau of Customs*, Record Group 56, NA.

20. *Alexandria, Virginia, Outward Foreign Mails*, 1801-1808. *Bureau of the Customs*. Record Group 56, NA. For similar, though slightly different figures see W. Freeman Gilson, "The Green Trade of Alexandria, Virginia, 1804-4516," *North Carolina Historical Review* 4 (October 1927): 409-427. For an overview of Virginia's trade in that period that focuses primarily on the port of Norfolk see Winifred J. Lowe, "The Foreign Trade of Virginia, 1790-1800," *Wilkes and Mary Quarterly* 1st Ser., 1 (April 1944): 365-176. On the 1800 yellow fever epidemic in Alexandria the best sources are the local newspapers: surviving issues of which represent the reports of the health committee established by the town council to deal with the outbreak: see *Alexandria Express*, September 15-October 21, 1800; and *Alexandria Advertiser and Domestic and Intelligencer*, September 15-November 1, 1800.

21. David C. Klingman has pointed out the economic importance of the overseas trade in his dissertation, "Colonial Virginia's Commerce and Green Trade," and in "The Importance of Green," 206-276. Klingman estimates that the total per capita corn consumption in Virginia in 1770 was eleven bushels (including cattle and human); "The Importance of Green," 273. In 22. Mark Hagers, calculating human consumption only, estimated per capita corn consumption at 8.8 bushels in 1850; see, "Blacksmith City County, Virginia, 1782-1840: The Rise and Social Structure of a Tidewater County in the Early National Years," Ph.D. Dissertation, The College of William and Mary, 1975. Appendix 4, 216-220. Given the high level of wheat production in southern Virginia, it is likely that much of that grain was consumed locally, at least by the free population. Klingman estimated per capita wheat consumption in Virginia at 4.3 bushels annually in 1770. "Importance of Green," 273, in 22. James Lomax, writing about Pennsylvania where corn consumption constituted a smaller portion of the diet, estimated annual per capita consumption at 7.5 bushels of wheat between 1760 and 1780. *First Free Man's Chapter: A Geographical Study of Early Settlements, Pennsylvania* (New York: W.W. Norton, 1971; originally published Baltimore, 1972): 255.

22. *Alexandria Daily Advertiser*, January 30, 1804; and *Alexandria Express*, January 18, 1805. Added to the foreign reports total shipments in those years were as follows:

	Flour	Wheat	Corn	Beans	Tobacco
1800	100243	100041.8	100400.5	20480	4001
1900	100093	5000	35011	30017	4004

Flour and bread (includes "biscuits" and crackers) recorded as barrels; wheat and corn as bushels; and tobacco as hogsheads.

50. See Chapter 1.

51. Eugene D. Genovese, *The Political Economy of Slavery: Studies in the Economy and Society of the Slave South*, Second Edition (Middletown, CT: Wesleyan University Press, 1968, originally published, 1963), 49; Ralph V. Anderson and Robert E. Gallman, "Slavery as Fixed Capital: Slave Labor and Southern Economic Development," *Journal of American History* 64 (June 1971): 84-90. For a contemporary view see Robert Russell, *North America, Its Agriculture and Climate . . .* (Philadelphia: Adam and Charles Black, 1817): 168-169.

52. Harold B. Gill, "Wheat Culture in Colonial Virginia," *Agricultural History* 53 (July 1979): 293-295; John H. Kupper, *The Wheat Plant, Its Origin, Culture, Growth, Development, Composition, Nutrition, Diseases, Etc. . .* (Channahon: Moses Wolbach, Kaye & Co., 1895): 475-477; Carolyn V. Earle, "A Single Interpretation of Slavery and Free Labor," *The Georgetown Society* 25 (January 1975): 54-58; John Ferdinand Folsom, *Slavery: A Treatise of the United States of America*, 2 Volumes (New York: New York Times and Arno Press, 1968, originally published: London, 1794), I: 118-127; Opies: 110.

53. Earle, "Slavery and Free Labor," 55, 57; see also Earle, *North America*, 153-154; and Eugene J. Fuble, *Slavery and Freedom in the Middle Ground: Maryland during the Nineteenth Century* (New Haven: Yale University Press, 1980): 4-5, 29. Note, however, that Paul Finkelman documented a gap in the slave population of Maryland's Eastern Shore between 1720 and 1770—that is, at the very time when the region was shifting to the production of grain: *American Frontier*, 121, 144-145, 162, 167.

54. See, for example, James E. Irwin, "Exploring the Affinity of Wheat and Slavery in the Virginia Piedmont," *Explorations in Economic History* 30 (July 1993): 299-323, who argues that in the Virginia Piedmont in the 1820s, the "wheat crop was concentrated on slave plantations" (299).

36 Robert McColey, *Slavery and Jeffersonian Virginia*, Second Edition (Ithaca: University of Illinois Press 1972 originally published, 1964) 134-162; Winston Jordan, *White Over Black: American Attitudes Towards the Negro, 1789-1833* (Chapel Hill: University of North Carolina Press 1968) 242-408; Hughes, "Blancheth City County," 128-129; *Gray: Agriculture in the Southern U.S.*, 1: 308-320 320-326; esp. p. 320. Note also that Morison Robert Carter, 304-305, argues that Carter owned significant quantities both from neighbors and his family when he manumitted his 500 slaves beginning in 1781.

37 Genevieve Edmonds, *Emancipation*, 126-127, dates the movement of slaves from Virginia to the Deep South to the 1820s. On the migration of the slave population west and south generally see *Gray: Agriculture in the Southern U.S.*, 2: 658-668. Sarah Hughes found that the slave population of Blancheth City County dropped from 56.3 percent of the total county population in 1792 to 48 percent in 1812. She argues, however, that this population did not move west or south but followed their owners to other settled parts of Virginia. The ten years between 1795 and 1805 represented the 'most drastic' period of population adjustment for both white and black between 1780 and 1820, "Blancheth City County," 70-78, 80-81, 127-128, 128, 129-130, 329.

38 See, for example, Frederic Bancroft, *Slave-Trading in the Old South* (Columbia: University of South Carolina Press, 1966) originally published, Baltimore, 1903; 145-164; Gray, *Agriculture in Southern U.S.*, 1: 320-327, 2: 487-608; Kenneth Stagg, *The Frontier Institution: Slavery in the Antebellum South* (New York: Vintage Books 1962) 67-72, 74-114; Robert William Fogel and Stanley E. Engerman, *Time on the Cross: The Economic of American Slave Slavery* (New York: W.W. Norton 1968) originally published 1974; 62-82, 87-103; Eugene Genovese, *Roll, Jordan, Roll: The World the Slaves Made* (New York: Vintage Books 1974) originally published 1970; 9, 180-202; Randolph B. Campbell, "Downsized News: Slave Working on Texas," *American Historical Review* 63 (February 1978): 107-124, and Chapter, *American Periodical*, 86, 123-124, 218-227.

41 Sarah S. Hughes, "Slaves for Hire: The Alienation of Black Labor in Blancheth City County Virginia, 1789-1830," *William and Mary Quarterly*, 3rd Ser., 35 (April 1978): 288-294 esp. pp. 289-290; also, "Blancheth City County," 67-69, 125-129, 131-133, 134; Peter Wex, *Common Labor: Workers and the Dipping of North America, 1780-1860* (Cambridge: Cambridge University Press 1992), 86; McColey, *Slavery and Jeffersonian Virginia*, 77-78; Gerald N. Mello, *Church and Believing: Slave Resistance in Eighteenth Century Virginia* (New York: Oxford University Press 1976), 83-84. See also Morison Robert Carter, 78-77, 108-127, 303, 305. In 1791, Carter listed out only 11 slaves directly, but he also listed all

but two of his eleven plantations, including the slave *Sharon*. David B. Goldfield, *Slavery, Growth in the Age of Revolution* (Virginia, 1987, 2002) (*Slavery Scope*: Louisiana State University Press, 2007) 180-186, notes the frequency of slave buying as when Virginia in the fifteen years prior to secession. "Slave buying," he writes "underscored the versatility and flexibility of... slavery in a modern white setting" (187).

42 In the 1780s and 1790s see, for example, *Virginia Journal and Alexandria Advertiser*, Feb. 18, 1787; *Virginia Chronicle*, April 28, 1788; *Virginia Gazette and Alexandria Advertiser*, April 29, 1790, January 27, February 17, March 30, June 28, November 30, 1791; January 18 (twice), November 1 (twice), November 5, 1792; *Columbian Mirror and Alexandria Gazette*, April 29, May 24, October 28, 1794; August 1, 1795; January 11, February 6, March 18 and 27, April 16 (supplements), May 12, June 4, August 8, November 10, December 1, 5, 8, and 27, 1796. This list is by no means inclusive. Thomas Paine argues that slave buying was "widespread in Alexandria" prior to 1775, and that many merchant firms had their slave lists. "Eighteenth Century Alexandria," 58-59. Likewise, Eugene D. Smith, *Cottrellville, Virginia: Its History and Architecture* (Farmingdale, VA: Fairfax County Board of Supervisors, 1977), 64, argues that slave buying provided "a significant source of income for several residents of Cottrellville" a village twenty miles west of Alexandria, in the early nineteenth century.

43 *Virginia Journal and Alexandria Advertiser*, November 3, 1785. Similar advertisements appeared annually in the Alexandria newspapers until the completion of the river works in 1808.

44 Meetings of May 10, July 1, and September 3, 1785. Records of the Potomac Company, Proceedings, 1785-1807. National Parks Service, Record Group 75. NA. *Virginia Journal and Alexandria Advertiser*, June 9, 1785. George Gilpin to Washington, July 16, 1785, Grace L. Hunt, ed. "Washington and the Potomac: Manuscripts of the Minnesota Historical Society, 1784-1788-1789." *American Historical Review* 28 (July 1922): 212; James Ramsey to William Hartshorn, September 28, 1778. Records of the Potomac Company: Correspondence and Reports, 1780-1811, National Parks Service, Record Group 75. NA.

45 Meetings of September 3, October 18, 1785, and October 4, 1786. Records of the Potomac Company, Proceedings, 1785-1807. National Parks Service, Record Group 75. NA. *Virginia Journal and Alexandria Advertiser*, April 27, May 18, June 29, July 13, August 3, 17, 24, November 3 and 16, 1786. The company continued to pay some free labor and a few individualized payments in later years, particularly in skilled positions, but between 1788 and 1800 it relied more heavily on hired slave labor. Indeed, by 1789 the

company was losing upwards of 200 slaves per year, and in 1793 300 slaves were hired, see *Virginia Gazette and Alexandria Advertiser*, December 25, 1792, and *Columbian Messenger and Alexandria Gazette*, December 30, 1795. For another description of the company's problems with its labor force and its ties to slavery see *Wey, Common-Lawing*, 13, 19-20, 105-107.

40. *Alexandria Daily Advertiser*, December 27, 1805, July 22, 1806, and October 24, 1807. See also Timothy J. Minchin "The Origins of the West End and the Little River Turnpike: Urbanization and Economic Change in Northern Virginia, 1790-1820," M.A. Thesis, Washington State University, 1999, 87-93; and Philip Morrisson Rice "Factors of Improvement in Virginia, 1775-1805," Ph.D. Dissertation, University of North Carolina at Chapel Hill, 1948, 445. The incorporating act of the Little River Turnpike Company is found in *Shepherd's Statutes at Large*, 2: 383-384; it passed the Virginia legislature January 28, 1802.

41. Indeed, Lewis Gray reports that in the late 1790s there was "an expansion of tobacco production, even in the wheat growing section of Loudoun County, Virginia," *Agriculture in Southern U.S.*, 2: 485.

42. Stoddard, *Geography*, 52. John Taylor *Essay, Being a Series of Agricultural, Economic, and Political, Instructive Tracts*, Fourth Edition (Fredericks: Whitworth & Conroy, 1818; originally published, 1812): 127 (quote), 92-71; see also M.F. Cohen, "Some Fragments of an Intended Report on the Post Revolutionary History of Agriculture in Virginia," *William and Mary Quarterly*, 3rd Ser., 38 (January 1981), 162-182. It is notable that though Taylor was a resident of Caroline County (lying between Richmond and the Rappahannock River), he first chose to publish *Essay* in 1812 in a Georgetown newspaper, *The South of IT*. Thus the improving farmers of northern Virginia must have been closely familiar with the work, see Robert E. Shalhope, *John Taylor of Caroline: Federal Republican (Chapel Hill: University of South Carolina Press, 1984), 120-221*.

43. See, "Slavery and Free Labor," 15, 41. Gray, *Agriculture in Southern U.S.*, 1: 175-174, 2: 813-815. Taylor, *Essay*, 168-115. *Essay of the U.S.*, 3: 149. Russell, *North America*, 51-53. *Report, The Wheat Plant*, 625-681. For a detailed description of corn culture from planting to harvest see, Matthew P. Hardeman, *Shanks, Shanks, and Hominy Bolls: Corn as a Way of Life in Frontier America (Baton Rouge: Louisiana State University Press, 1987), 50-121*.

44. Taylor, *Essay*, 85-86 (quote 82), 99-101 (quote 102).

45. For a full discussion of the extent of agricultural improvement in the region see Chapter 7.

## CHAPTER 5 RIVERS AND THE MARKET

On August 30, 1794 "A Farmer," writing in the *Virginia Journal*, celebrated the fact that "America's independence" was "finally and completely accomplished." The Farmer was most impressed by the commercial possibilities of the new United States: that was "a country," he observed, "formed for the most extensive commercial concerns [sic]." The commercial prosperity required that Americans turn their "attention" to the matter of opening the country's "internal intercourse." In particular, a Farmer explained northern Virginians to look "no time with respect to the navigation of the Potomack on a large and extensive plan." He noted that "no district . . . in the United States . . . has increased [sic] so much as the country on the Potomack in population and riches," and he pointed to the "many" and "obvious advantages" the navigation would have for "the inhabitants of the various branches" of the river. Moreover, the proposed benefits would be mutual in scope. The river, he declared, could be used to establish a "general communication from the eastern to the western country." Because the headwaters of the Potomack lay relatively close to those of the Ohio a Farmer believed that when the Potomack had been cleared a canal of only eighteen miles "from a branch of the Potomack to a

lands of the Ohio' would enable boats to pass unobstructed from the western territories to the eastern seaports. Linking the east to the west in this way would create "a general Union of interests" in the nation. The Fortman project, then, promised prosperity to the inhabitants of the "country on the Potomack" while helping to cement the new and fragile Union. "No undertaking," a Farmer concluded, "can be conceived of greater importance to its public as well as private consequences."<sup>10</sup>

The Farmer was not the first to see a great future in the Potomac. As early as the late 1740s, a small group of northern neck gentry—consisting of men such as Thomas Lee, George Mason, Robert Carter, and Augustine and Lawrence Washington—had seen the Potomac River valley as the primary means to access the West and enrich themselves. In 1747 they created the Ohio Company and requested a patent from the British crown for 200,000 acres near the forks of the Ohio River which they received in 1749. The company's founders hoped to profit from land speculation, the fur trade and imperial expansion into the west. The French and Indian War, however, thwarted the plans of the Ohio Company's founders. Still, hopes for the Potomac route to the West remained bright. In 1754 George Washington, who would come to play a central role in efforts to clear the Potomac, argued that the river presented "the most expeditious way" to the Ohio country, and that it only required the removal of a few obstructions to make it navigable. In the early 1760s a group of adventurers which

included Thomas Green of Maryland proposed the formation of a company to clear the Potomac, but nothing came of the plan after Parker's Rebellion and the Proclamation of 1763 closed the West.<sup>1</sup>

Despite the imperial restrictions, in the late 1760s John Sample – a Virginia merchant originally from Scotland, proposed a new scheme to make the Potomac navigable. Sample operated an ironworks at Deep Water near of Rappahannock Ferry. He hoped to use the river to transport unpromised iron from that point to his iron mill on the Occoquan River in Prince William County south of Alexandria – and even the expenses of land transport. Sample promoted his plan, however, by emphasizing its extensive benefits. In 1768 he presented to Washington a proposal which estimated the cost of clearing the Potomac at \$5,000. He stressed that the Potomac presented the "best channel [sic] for inland trade that can be possibly had in British America." "The vast business of land now ended to us by the Indians" by the 1768 treaty of Fort Stanwix, he argued, "must open a new and extensive field of commerce," particularly for "the very lucrative Skin and Fur [sic] Trade." More directly, clearing the Potomac would allow farmers and manufacturers bordering the river to transport "any commodity whatever," "with Safety and ease at a small and reasonable Expence." Apparently Washington was convinced of the practicality of Sample's plan for in December 1768 he and Richard Henry Lee presented a bill

interpreting the proposals to the Virginia House of Burgesses. The bill was read twice and engrossed, but no further action was taken.<sup>3</sup>

Others were equally inspired by plans to clear the river. In June 1770 Thomas Johnson of Frederick County, Maryland, conveyed to Washington a "subscription paper" seeking the backing of private individuals willing to finance a navigation project. Like Bemple, Johnson operated an iron works west of the Blue Ridge Mountains and sought a means to transport his product cheaply to world markets. The Patuxent navigation, he noted, would have "immediate advantages" for "Landholders on the navigable Waters," lowering the costs of transporting their produce to market. Accordingly, widespread local support for the project could be expected. Like Bemple, however, Johnson outlined the benefits of his proposal in the broadest possible terms. Clearing the river, he argued, held out "future advantages" that would benefit "the Community, as well as the Soil." In particular, the Potomac would become "the Channel of Commerce and Connection between the new Country westward and Britain."<sup>4</sup> Equally important, Johnson was convinced that lower transportation costs would induce Virginians and Marylanders farmers to switch from tobacco to wheat. "The much Tobacco," he argued, "which has been raised," leading to glutted markets and lower prices. The region's farmers continued to cultivate the weed because the costs of land transport were "usually two to one as four" of bringing Tobacco to Market rather than

Wheat." If the Potomac were cleared, however, the costs of carrying wheat would fall "and hold at least." The report might thus "greatly increase our Export of wheat" to Europe, where a rising "Demand" had led to a dramatic rise in "the price."<sup>10</sup>

Making sense of Johnson's scheme in 1770, but he remained the most enthusiastic supporter of clearing the Potomac River in Maryland.

Moreover, he realized that success required cooperation with supporters of the scheme in Virginia where Washington was taking a leading role in promoting similar plans. By 1772 the two men were actively collaborating. That year Johnson presented a bill to the Maryland assembly which authorized trustees to raise money by subscription and lottery to extend the navigation of the Potomac from the Tidewater to Fort Cumberland, 200 miles to the west. Simultaneously Washington presented a comparable bill to Virginia legislators. In Maryland the plan floundered due to the opposition of Baltimore merchants who feared that Georgetown would supplant their growing town, and the concerns of Governor Robert Eden that the Potomac bill would "weaken the proprietary claim of parliament" over the Potomac. Washington was more successful in Virginia and the bill became law in February 1772, though it stipulated that if action were not taken by November 1, 1773 the act would become void. When Maryland legislature failed to pass a similar statute the Virginia act was stillborn. As Washington noted to Marylander Jonathan Boucher the "Execution" of the

Virginia legislation "must necessarily be suspended, till some thing similar passes into Law in your province"<sup>10</sup>

Yet the Virginia law generated further activity. John Ballentine, a Virginia ironmaster and entrepreneur, approached Washington with a plan to excavate "all the canal and inland navigators in England, Scotland, and Ireland," in order to "quickly himself" to direct the construction necessary to make the Potomac navigable. Washington, impressed with Ballentine's "natural genius" for works "of this sort," believed some "management" should be offered. However, he worried that the lawmakers' "local" prejudices might convince others to withhold support. Over the previous twenty years Ballentine's conspicuous projects had earned him "a reputation for business dishonesty." As R.H. Lee noted in 1796, Ballentine "will talk amazingly, promise most highly but do nothing to purpose." In the end, Lee concluded, "very little may be expected" from his schemes. Still, Ballentine generated sufficient backing to fund a two year visit to Great Britain and France, where he absorbed engineering knowledge and "a great variety of machines and utensils" needed for work on the river. In 1794 he returned to Virginia, surveyed the Potomac and estimated that it would cost £44,800 to remove all obstructions from the river between the Tidewater and Fort Cumberland.<sup>11</sup>

Ballentine's proposals soon attracted a number of prominent Virginia and Maryland supporters. Twenty-one Virginians from the northern neck...

and twenty-two Marylanders agreed to back the project and were appointed trustees. In December 1774 some of the trustees met in Georgetown and Alexandria and authorized Ballentine to hire fifty slaves to begin construction on a canal around the Little Falls of the Potomac. At the same time George Mason of Virginia was appointed to draft a new bill that would authorize the trustees to establish a company empowered to draw the river for irrigation. By March 1775 he had completed the task and the bill was ready to present to the Maryland and Virginia assemblies.<sup>7</sup>

By this time, however, the scheme faced a new problem. The escalating revolutionary crisis distracted the attention of the region's leaders and disrupted the colonial legislatures. The Maryland legislature never met after April 1775, and though a Potomac River bill passed the Virginia house in June 1775 it never received royal assent. Yet even if the Revolution had not interrupted the project faced a severe shortage of funds. Though Ballentine estimated that some £40,000 would be needed to complete the project, the trustees themselves had subscribed only £6,750 in Pennsylvania, Virginia and Maryland currencies and collecting the money promised to be difficult. Johnson noted in early 1775 that he could not "raise any sum of money without selling a part of my Estate" and he cautioned other subscribers to the scheme were "discouraged as myself." He concluded that unless the Maryland assembly agreed to "assist us" by loaning "a sum of money . . . to the subscribers," financial shortfalls would

apple the project. Perhaps that explains why Washington could report that "next met" when he traveled to Alexandria in late January 1774 for a meeting of the trustees.<sup>10</sup>

The problem of insufficient capital was one that Washington had known as early as 1770 when Johnson first proposed the creation of a private company to clear the Potomac. Washington heavily concurred in the idea, but he questioned whether a private enterprise lacking government support would possess adequate capital. Two groups, he reported, could be created upon to support the project. "Those who are actuated by motives of Public spirit, and those . . . who from proximity to the Navigation will reap the salutary effects of clearing the River." But while Washington anticipated broad support among those "whose Interest must naturally induce them to wish well to the undertaking," he doubted that people "unconnected with the River" would subsidize the project. To circumvent this problem, he proposed that any private company formed be "vested by the two Legislatures with a kind of property in the Navigation." The company's jurisdiction over the river would enable it to collect tolls after the river had been cleared and reimburse investors "their first advances with a high Interest." The abundant profits Washington reported would attract "a third set" of investors "the named Gentry," by whom support the company would "gain considerable strength." This principle

was included in the shorter 1778 Virginia bill. More important, it also underlay the post-war efforts to clear the river.<sup>2</sup>

Interest in the Potomac navigation rebounded quickly after the war. Shortly after Washington returns to Mount Vernon in December 1783, he received a letter from Thomas Jefferson urging that new efforts be undertaken to make the river navigable. Jefferson argued that the Potomac provided the best means of linking the eastern ports and the western territories. The proximity of the upper reaches of the Potomac's north branch to the Youghiogheny and Cheat Rivers, he argued, made them the "true doors to Western commerce." Jefferson knew only one possible route to the Potomac rose to the west. New York City could be linked to the Ohio territory by a tedious route which involved the Great Lakes and Mohawk River. This northern route was "already open and known to practice," he noted, but "the trade of the Ohio . . . is nearer to Alexandria than to New York by 730 miles." "Western," Jefferson contended, "has declared in favour of the Potomac, and through that channel offers to pour into our lap the whole commerce of the Western world." He proposed that the Virginia legislature lay a specific tax to finance the project, though he realized that a new tax would engender widespread opposition. And he called upon Washington to head the project: only a person of the retired General's stature could "reconcile" such objections. Finally, Jefferson urged prompt action. He was convinced that independence afforded an

unprecedented opportunity to link the east and west. "This is the moment . . . for acting," the western leader, he wrote, "if ever we mean to have it."<sup>19</sup>

Of course, Jefferson was providing to the interested Washington needed help providing to remain his efforts to clear the river. He replied to Jefferson that "my opinion coincides perfectly with yours respecting the practicability of an easy and short communication between the waters of the Ohio and Potomac." He noted, however, that any project to clear the river must also involve the state of Maryland whose "interest and policy . . . is proportionately concerned with that of Virginia to remove obstructions." He recommended that Jefferson contact Thomas Johnson from whom "great information may be derived" regarding the strength of support in Maryland. He also doubted whether Jefferson's banking plan and the imposition of new taxes "in payment . . . made" would find any support in Virginia.<sup>20</sup>

Soon thereafter Congress opposed Jefferson as the American representative to France, and his involvement in the project ended.

However, interest in the Potomac navigation remained high. In April 1794 William Scott, a prominent resident of Alexandria and eventual member in the Potomac Company, alluded to the "very liberal and patriotic commercial movement of the town" which promised to make it "amongst the best trading towns in the United States." Four months later the article by "A Farmer" specifically calling for the Potomac to be cleared appeared in the public prints. Finally, on September 1 Washington set out on a month long

journey to the West, ostensibly to visit his "Landed property West of the Appalachian Mountains" and establish legal title to lands in Washington County, Pennsylvania of which squatters had taken possession. However, Washington also undertook the trip "to obtain information of the current and best communication between the Eastern & Western Princes; & to facilitate as much as in me lay the Island Navigation of the Potomack." Indeed, by the journey's end the Potomac navigation had become his primary focus.<sup>22</sup>

Washington's journey confirmed for him the advantages of clearing the Potomac. Not only would it direct the "immense" produce of "all that fertile Country between the blue [sic] ridge and the Allegheny [sic] Mountains" to the ports of Alexandria and Georgetown, but it would enable the Potomac ports to capture the "immense" trade of the entire Ohio country. Equally important, linking the eastern states and western territories via the Potomac would help strengthen the new nation's political ties. The western settlers Washington believed, lacked a clear allegiance to the United States because the only feasible market for their produce was Spanish held New Orleans. The southern Washington wrote "instead as it were as a price- the trade of a Southern would almost incline them any way." Thus, America must "apply the concept of interest to bind all parts of it [the nation] together." And the most desirable place the country could employ was "commercial enterprises" because these were the "most difficult to destroy."

Thus, it was in the interest of the nation "to open a wide door, and make a smooth way for the Freedom of [the Ohio] Country to pass to our Markets before the trade may get into another channel."<sup>10</sup>

Washington's journey also persuaded him that the north branch of the Potomac (Maryland's southern boundary) could be most easily linked to either the Cheset or Troughgheny, both tributaries of the Monongahela which eventually flowed into the Ohio at Pittsburgh. He determined that the distance from Detroit to Alexandria via the Troughgheny amounted to some 607 miles, with two portages of seventeen miles. From Detroit to Alexandria via the Cheset River would total 603 miles, with twenty-eight miles of portage. In contrast, the distance from Detroit to Philadelphia amounted to at least 741 miles (with numerous portages) and from Detroit to New York 843 miles. Thus, "the shortest, easiest, and least expensive communication with the valuable and extensive" territory west of the Appalachians was via the Potomac.<sup>11</sup>

Upon his return to Mount Vernon on October 4, Washington actively campaigned to gain broader support for the Potomac project. He addressed a long letter to the governor of Virginia, Benjamin Harrison, which described in detail the advantages of opening links to the West.

Washington realized that support for such a project would founder on the sectional conflicts within the state. In order to overcome such resistance he recommended that Harrison appoint commissioners to survey the Potomac

and James Bevers, and wanted the governor that both men "will be found of equal importance and convenience" in providing navigable routes to the west. Finally, he urged the passage of an act to incorporate a private company (or companies) to raise the capital to clear the rivers. Washington sent a similar letter to George Plater, a senator in the Maryland legislature, and by the middle of October he had forwarded a draft of a petition calling for the creation of a company to clear the Potomac to Thomas Johnson.<sup>14</sup>

Washington's efforts aroused widespread support throughout northern Virginia and Maryland. On November 15 "a very numerous and respectable meeting" of supporters of the "great, good, political and commercial Object, the rendering navigable of the River Potomack from Tide Water" met in Alexandria. The meeting, which attracted supporters from both Virginia and Maryland, "unanimously resolved" to forward petitions and a draft bill to the legislatures of both states asking "to form a Company, with such limitations as might seem meet to them to grant." The petition and bill reached the Virginia legislature on December 4. It represented the chronic expression of Washington's ideas about the benefits of the project and the organization needed to do bring it fruition. After first asking that a navigable Potomac would encourage the "Agriculture and commerce" of the northern Virginia and western Maryland, the petition argued the "beneficial political Consequences" a regular "intercourse" with the Western Settlements would have for "the federal Union." Moreover, the

petitioners specifically requested that the legislatures of Virginia and Maryland establish "a Company with a large Capital and adequate power to be empowered for their expense and charge by moderate permanent Tolls secure to them[,] clear Hens and Assigns." The new company, then, was to be given earnest domain over the river in return for making it navigable. The petitioners concluded by declaring that it was "various" that "Sufficient Capital" would be "soon Subscribed by men able to comply with their engagements."<sup>10</sup>

The Maryland legislature quickly passed a bill creating the Patowmack Company. In Virginia, according to James Madison, the assembly "lost a ready ear to the project" but the length of the proposed toll aroused opposition. In mid-December the Virginia legislature appointed Washington, Bernard Gates, and Thomas Bladenborough through the task ultimately left to Washington to negotiate with commissioners from Maryland to compose a bill satisfactory to both states. The commissioners met on December 22 and by December 26 Washington could report that an act had passed through both houses of the Maryland assembly "in a day" and "with only 3 dissenting voices." The new statute "reduced most of the Tolls from what they were in the first Bill" in order to respond to the criticism of the Virginia house. More important, it authorized "such State to contribute (upon the terms of private Subscriptions) to the expense of" the

undertaking. The revised bill was presented to the Virginia legislature a few days later and "passed without opposition" on January 12, 1765.<sup>11</sup>

Now that Washington's efforts were required, however, to ensure that the Potomac Company bill passed the Virginia legislature. While Washington was in Annapolis, Mifflins had taken charge of passing a series of internal improvement bills that were intended to appear all sections of the state. In December 1764 an act to survey the James River and to create a company to clear the river passed the House. In January the legislature passed resolutions calling for a survey of the land between the two branches of the James and the New River (which flowed northwest into the Ohio), and the construction of a road to link the two. A similar resolution (passed jointly with the Maryland assembly) called for a survey of the territory between the north branch of the Potomac and the Chesapeake and the eventual construction of a road between those two rivers. Finally, an act to survey the region of the Diamond Swamp (in southeast Virginia) and eventually construct a canal between the Elizabeth River and Albemarle Sound in North Carolina was passed. Only by such "toppling" was Madison able to generate support for the Potomac project. However, these miscellaneous efforts depleted the resources that could be expended on any one project.<sup>12</sup>

The act for "opening and extending the navigation of the Potomack river" incorporated the "Potomack company" as a private joint-stock

enterprise. The new company was empowered to clear the Potomac River and construct all necessary works in return for "reasonable tolls levied" imposed on all craft that used the river, though the river itself was deemed a public highway. The work was to begin within one year, and the company required to clear the river from the Great Falls "to the highest place practicable on the North branch" within three years, and from the Great Falls to the Tidewater within ten years. The legislation authorized the company to issue 500 shares valued at \$100 Sterling (or \$144.44 each for a capital reserve of \$50,000 or \$125,000). The states of Virginia and Maryland were required to buy fifty shares apiece. The company was empowered to sell the shares of delinquent subscribers, and to purchase land along the river (or have it condemned by the courts). The state established an elaborate net of toll rates, and authorized the company to deny passage or in some situations to seize the vessels of those who refused to pay the required tolls. The act also mandated that the vessels and all the works constructed by the company were to be regarded as real estate, and were to remain tax exempt. The legislation was designed to encourage private investment in the company, as was Virginia and Maryland's purchase of one-fifth of the stock.<sup>17</sup>

The measures worked well: the public support for the project was high. The shares went on sale in early February 1785 in Alexandria, Baltimore, and Washington, Virginia, and Georgetown, Annapolis, and

Fredericktown, Maryland. By April subscriptions by individuals totaled \$20,808. The *Alexandria* newspaper reported in April that subscriptions “are [p]roceeding so fast, that” the “[p]roject and important Work” of clearing the Potomac “will be immediately carried into Execution.”<sup>40</sup> When the company first met in Alexandria on May 17, 40% of the 508 shares had been subscribed. Of that total the state of Virginia had subscribed for 100 shares (50% in the name of the state, and 50% purchased by the state for Washington) and the state of Maryland had subscribed for 50%. Within months of the company’s initial meeting, individuals purchased another 1000 shares so that by the end of the year a total of 158 individuals had acquired 200 shares. The remaining stock was sold after 1793, when the Virginia legislature allowed the company to sell its shares to foreigners.<sup>41</sup>

What kind of individuals purchased the shares in the Potomac Company? Though subscription books do not survive, it is possible to identify with some certainty all the original investors from lists of shareholders who attended company meetings, registers of delinquent subscriptions, and the records of share transfers and sales (which were recorded after 1794). As Washington reported, most of the investors were persons who resided within the Potomac watershed, and thus could expect to benefit directly from the project. Of the 148 individuals who bought shares from the initial offering of the Potomac Company, 144 (95 percent) resided in Virginia. Of the Virginia shareholders, sixty-four (58 percent) resided in

Alexandria, Fairfax, Prince William or Loudoun counties (that is, the upper northern neck east of the Blue Ridge), thirty-two (85 percent) in the lower Shenandoah Valley, fourteen (35 percent) in the lower northern neck, and eight (4 percent) beyond the Potomac watershed. Of the remaining eighty-four shareholders, sixty-one (84 percent) were from Maryland (with most residing in the Georgetown area or western Maryland) and three (including Robert Morris of Philadelphia) resided outside Virginia and Maryland.

Washington was also correct in assuming that the "wealthy gentry" would be attracted to the project. One of the best measures of wealth in a society such as Virginia was slave ownership. Of the Virginia shareholders, forty-owned fifteen or more slaves, and fifty-five owned fourteen or less. Only sixteen individuals owned no slaves and another seven could not be located in census records. On average, Virginia shareholders owned approximately twenty slaves. Thus, as one would expect given the high cost of the shares, the company attracted primarily wealthy investors. But also notable was the number of shareholders who were not planters or farmers. Though it is difficult to identify positively the occupations of all individuals in an age in which speculation was ubiquitous, it is clear that among the shareholders there were a significant number of merchants, manufacturers, townshipsmen, and mariners. Indeed, forty-seven (or 40 percent) of the Virginia investors whose occupations can be identified made their living in commerce or manufacturing, including numerous merchants (many of whom

also operated mills), one millmaker (John Ballentine), a baker (James Kirk), two ship captains (John Harper and Thomas Work), and four tavernkeepers.<sup>20</sup>

The initial meeting of the Potomac Company was attended by many-one shareholders in person or by proxy. The first order of business was to elect the company's president and directors. In recognition of the leading role Washington had played in bringing the company into existence, the subscribers elected him president. They also elected Thomas Johnson and Thomas Ross Lee of Maryland, and John Fairbank and George Gilpin of Alexandria as the company's first directors. Johnson and Lee were both leading figures and supporters of the project in Maryland, and Fairbank and Gilpin represented Alexandria's northern community which strongly supported the enterprise. When the directors met in late May, they appointed the Alexandria merchant William Hartshorn treasurer, and Jonathan Fortin clerk of the company.<sup>21</sup>

Though the company began with high hopes for rapid progress, difficulties arose soon after work began. Indeed, throughout its history the company was faced with a series of persistent problems which delayed the project's completion and eventually forced many northern Virginians to seek alternative methods for transporting their produce to markets. The company's legislative charter required that the river be cleared within ten years, and that lands flowing out foot of water should be able to navigate

the river in "dry seasons." However, the company did not complete the canal around the Great Falls until February 1893, and the river was rarely passable for boats of any size in the driest months of the year. As James Mason, the president of the company admitted in 1898, though "much better we already have expended, to improve the bed of the River." There were "many places where . . . considerable work yet remains to be done, to make it [the river] well capable of navigation as times of low Water." As a result, the company directors were compelled to request periodically extensions in the time needed to complete the project.<sup>14</sup>

The inability of the company to finish the project in accordance with the specifications of its charter can be traced to three inter-related problems. First, for a variety of reasons the Potomac Company faced chronic revenue shortages even after land banks were formed to supply new sources of capital. Second, the inexperience of the early directors led them to drastically underestimate the costs of the project as originally envisioned, and their lack of technical training led to errors of costly engineering decisions, some of which could never be corrected by subsequent company directors. Finally, the early leaders miscalculated the difficulties involved in labor recruitment. They found that the limited supply of both skilled and unskilled labor hampered the project's completion.

Capital delinquencies forced the company almost from the outset of its efforts. As the directors noted in 1790 they were frequently faced with a "Wantonness of Funds." The company's officers found it fairly easy to solicit subscribers, but they had less success in convincing subscribers to pay for their shares as payments came due. Part of the problem arose from the method which the company chose to sell the shares. Subscribers were required to pay no money up front; shares were to be paid for in installments as the company's needs dictated. This "pay as you go" method of capital recruitment may have encouraged more subscribers, but it also prompted a degree of recklessness among some investors. From the moment the company demanded partial payment on the shares they had difficulty collecting.<sup>17</sup>

The directors required that a first installment of 65 or 833 33 1/3 percent of each share be paid on July 15 and October 1, 1786 respectively. Further installments of 10 percent of the total cost of the share were to be paid on March 6 and April 15, 1786. Many subscribers were unable to pay these early requests. In early March 1786, the directors instructed Hartshorne to send requests for payment to individual shareholders in Annapolis and Alexandria, and to the states of Maryland. In August Hartshorne reported that the first four calls for money had secured only 65,548 of the 833,333 expected. The high rate of delinquency forced the board in January 1787 to set new deadlines

for the payment of the delinquent shares, at the same time it threatened to sell those shares left unpaid at public auction on May 24 and May 26. When the delinquents still failed to pay the company attempted to auction off the shares, but no one appeared to bid on the shares at the designated time. As more calls were made by the company for further payments on the shares, the number of delinquent subscriptions increased. By November 1762 there were forty three delinquent subscribers.<sup>16</sup>

The high rate of delinquency in the 1760s and early 1780s was undoubtedly related to the difficult economic times which struck Virginia in the mid-1780s. In early 1785 tobacco prices in Alexandria had risen sharply to \$1-20 (20s VA) per hundredweight in response to European demand and the disruptions in production caused by the war. By 1786, however, the price had dropped to \$1-20 (20s VA) per hundredweight as supply caught up to demand. As historian Norman Bayard notes, the sharp decline in tobacco prices, coupled with a sharp rise in imports of manufactured goods and the state government's policy of quickly retiring its war-time debts, depressed Virginia of specie. In this economic environment many subscribers found it difficult to meet the Potomac Company's demands.<sup>17</sup>

However, the problem was deeper than a temporary specie shortage, because even after Virginia's economy recovered the company continued to have difficulty collecting from some subscribers. The real obstacle lay in the general shortage of capital in the agricultural economy of northern Virginia,

As Washington noted in 1785, the successful completion of the Potomac navigation "depends wholly upon the subscription of what we have very little of, money." Whatever changes proponents of the Potomac navigation might hope to effect in the Virginia economy, they faced serious impediments. William Allison, a Scottish merchant who had settled in Falmouth on the Rappahannock River, pointed to the source of the problem. The property, he wrote, consisted "chiefly in Land, Slaves & Debt; none of which will command money at near their value." Like Allison, in the 1780s many of Virginia's "manned gentry" lacked the liquidity that would enable them to invest with ease in the Potomac Company.<sup>10</sup>

The deeper problem of capital shortage in an agricultural economy was not addressed until the mid 1790s, when local banking institutions were created in both Alexandria and Georgetown. In 1792 the Bank of Alexandria was created by the Virginia assembly at the urging of local merchants and planters. The quick sale of the bank's shares furnished northern Virginia with a capital supply of \$100,000. The Bank of Columbia was incorporated in 1793, with a capital of \$1,000,000 (though this sum was never fully realized). The difference these institutions made in the local economy is revealed in the public response to the company's sale of delinquent shares conducted in 1790. In contrast to the sluggish purchases of 1787, in February 1790 the company successfully sold more than thirty-one delinquent shares. Moreover, in August 1790 the directors decided to issue

100 additional shares costing £1100 (Sterling) or \$557.80 each. In December the Virginia and Maryland assemblies approved the company's new constitution, and purchased sixty of the new shares (twenty by Virginia, and forty by Maryland). More importantly, the forty remaining shares were purchased by individuals. In 1804 the directors could report that all but twenty more of the company's shares had been sold.<sup>19</sup>

By June 1797 the company had collected the full value of the second tranche of shares. Still, the directors found themselves with inadequate funds to complete the project. The problem, however, was no longer a shortage of capital in the region. By the mid-1790s the directors were forced to acknowledge the extent of their ongoing problems. Flashed with optimism about the ultimate outcome early supporters of the project had seriously underestimated "the magnitude of the Undertaking."<sup>20</sup> The complexity of the project's premises led to a series of erroneous engineering decisions only some of which could be eventually rectified. In short, the flawed judgments made by company leaders in the 1790s belatedly guided the directions of the 1790s and early nineteenth century.<sup>21</sup>

The first of those miscalculations was the estimation of project's total cost. The company's initial capital offering of £50,000 followed estimation that Ballentine had made in the early 1770s. Supporters of the project were convinced that this sum would prove more than sufficient for the task at hand, which they maintained would "be performed . . . at a moderate

expenses.<sup>7</sup> However, the extent of the work considered should have given them pause. As originally conceived the Potomac was to be cleared some 235 miles from Fort Cumberland (as Maryland) to Georgetown on the Delaware, over which distance the river dropped 1,466 feet. Moreover, after 1808 the company expanded the project and endeavored to open the tributaries of the Potomac. Most notably, the company worked to clear the Shenandoah River some 260 miles from Fort Republic (as Rockingham County) to Harpers Ferry where the river met the Potomac. Elsewhere in Virginia the company struggled to make navigable Patterson Creek for twenty miles, the South Branch of the Potomac for 180 miles, the Oregon for twenty miles, and the Opequon for twenty five miles from the point where each of these rivers met the Potomac. The company also tried to clear the Conococheague and Monocacy Rivers of Maryland some twenty five and forty miles respectively. At its most grandiose, supporters of the project imagined an integrated water system which would funnel the produce of the entire Potomac basin to Alexandria and Georgetown.<sup>8</sup>

On each of these rivers the goal was to improve the bed of the river. For example, the company directors reported the idea of building a wall water course the length of the Potomac River arguing that it was unnecessary and too costly. As Washington explained to Edmund Randolph (first president of the James River Company) in September 1748 "about the Great Falls" the directors planned "nothing more than to open a direct

passage is small, . . . currents going sufficient depth, and as much smoothness as may be to the surface." In short, they anticipated that "slight navigation" would be sufficient to make the Potomac navigable. Rivers (or channels) as the river was to be made using three methods: the construction of retaining walls to divert water to deeper channels, excavating the floor of the river in order to deepen the water, and opening narrow channels in the banks of the river around rapids and small falls. By this latter technique boatsmen avoided the "great shoar" of the river at mid-stream and would be able to drag boats upstream against the strongest currents. The expense of such works, Washington concluded, would "be infinitely less than what must arise from raising vessels building locks making towed paths, &c."<sup>17</sup>

Extended opinion on the question of the best means to effect water communications was divided in the 1770s and 1780s. Though many English engineers agreed that still water canals were necessary to ensure safe and reliable water navigation, most the early nineteenth century men interested Americans believed that, with some small improvements, the country's "natural extensive navigations" would suffice for water transport. For example, in 1774 an anonymous report addressed to a member of the Maryland assembly noted attempts to close English rivers had "Demonstrated how Difficult and uncertain it is made and to keep a River Navigable [sic] in its original Bed, where the Fall is Considerable." (182)

the same writer speculated that the problems experienced "May be owing to the hardness of the Bottoms" of rivers in England, which were "chiefly fitted to run over Clay and Marl covered with Stones and Gravel" and "will perpetually shift." In contrast, "the bed of potomack" was rocky; as a result "such Passage may be Accomplished without the Necessity" of locks and weirs. Similarly, an article published in *Alexandria* in 1794 argued that "Natural Rivers should be widened [and] as much as possible." In fact, this report constituted a virtual blueprint of the Patuxent Company's technical decisions: "Encourage Locks—Encourage Helixes Work, deepening Shallows, and removing Rocks—improve the natural Beds of your Rivers—Food the most natural Channels with six Waters."<sup>10</sup>

Unfortunately, the use of such techniques led to numerous problems that were not anticipated by the initial directors. First, navigation on the river was used dependent on the water flow which varied with the seasons. In the summer months the water levels dropped sharply, making the river unsuitable for all but the lightest boats. In contrast, in the spring the water levels of the river rose dramatically increasing the velocity of the current and making river navigation downstream extremely hazardous and the return trip largely impossible. As a result, even in the best years the river remained navigable for no more than three months each year. In addition, frequent flooding eroded the channel walls and silted down constructed by the company, and often clogged the channel and canal beds

with silt and driftwood. Studies have estimated that the Foxman carries some 400 million tons of "solids in suspension" (mostly silt) each year to the tailwater from its 15,000 square mile drainage area. As a result, the company was forced to spend a significant portion of its income developing channels and repairing retaining walls even after the canal around the Great Falls was completed in 1902.<sup>22</sup>

More problematic still was the fact that the company's works exacerbated the natural difficulties. Retaining walls, when they could be kept in proper repair, confined the water flow of the river within a narrow channel and increased the velocity of the current. This made passage downstream exceedingly hazardous and travel upstream more difficult. As one reviewer by the name of Dickey reported, going upstream was "the hardest work ever done by man." Partial deepening of the bed of the river only served to relocate shallows further up the river and created deep "bays of little use. Finally, an 1892 analysis of the river navigation argued that though the channels built along the banks of the river were still in regular use, they were "of very imperfect, temporary construction." The writers of this report concluded, however, that the directors of the company exhibited no negligence in their management of the project. Rather, they "acted with the best lighted lanterns possessed by the best informed persons in our states." The report attributed the failure to make the river navigable year round "to a want of information on the subject, at the very

early period of our existence as a nation, when that company was formed.<sup>2</sup> As late as 1888 observers as informed as Albert Gallatin and Benjamin Latrobe could still view canals as man-made connections linking together natural waterways. By the time the Erie Canal was under construction, however, most educated people agreed that still-water canals provided the only reliable means for water transportation, and that the primary function of canals—with a few notable exceptions—was to supply the water necessary for such canals.<sup>3</sup>

Both lessons were laboriously and expensively learned, however, and in their initial surveys of the river undertaken in August 1785 the directors of the company identified only five primary obstacles to river navigation. Eight miles above the Great Falls, the company planned to build a 1,200 yard channel along the Virginia shore to bypass the Seneca Falls where the river dropped seven feet. Sixty miles upstream from the Seneca Falls lay the Shawandash Falls at Harper's Ferry where the Shawandash River met the Potomac. Here the river dropped approximately fifteen feet. To bypass the falls the directors decided to build an 1,400 yard channel against the Maryland shore. Five miles upstream from Harper's Ferry the river fell some three feet at Henshaw's Falls. At this point the company proposed a fifty yard channel along the Virginia shore. Only at the Great Falls where the river dropped some seventeen feet, and at the Little Falls at the head of the tributary where the river dropped some thirty seven feet were locks and

canals contemplated. At the Great Falls, five locks and a 1,300-yard canal were eventually constructed, while at the Little Falls, three locks and a 3,314-yard canal opened in 1793. The directors hoped that their decision to build locks and canals at all but the most difficult obstacles would lower both construction and maintenance costs (See Figure 3-10<sup>27</sup>).

By the early 1790s, however, they recognized that the early engineers' predictions about the project's costs were unrealistic and that Bellows's estimates were seriously deficient. This recognition manifested itself in requests by the directors to the legislature to modify the construction specifications of the company's works. In 1793 the directors requested that the required depth of canals be lessened from four to two feet. Such a change would "save one fourth part" of construction expenses and in no way hinder the passage of the boats which were expected to ply the Potomac. In 1798 the directors asked that the width of the locks as stipulated in the original Act creating the Potomac Company "be reduced from 18 feet wide to 14 feet wide." "The construction of locks," the directors noted, "will be a very great saving to the company." Finally, in 1802 the directors requested that the legislature clarify the language of the original act concerning the depth of the water in the river. The Act stipulated that the river should be "well capable of being navigated in dry seasons, by boats drawing one foot of water." This stipulation, the directors reckoned, could not be met. The company agreed instead that the phrase "dry seasons"



FIGURE 3-3 POTOMAC COMPAINT SPICES 1793-1828

should mean the "usual and common State of the River." In the "lowest season" the river's water levels dropped precipitously, and "no boats or the power of the company could render it [the river] navigable . . . in the manner required."<sup>10</sup>

Construction costs rose rapidly for a number of reasons. In August 1793 the company first assigned teams of workers to survey sites on the river between the Seneca and Shenandoah Falls. However, over the next four years construction efforts were plagued with extremely wet weather during the dry months from June to August. The resulting high water levels made work on the river bed difficult at best. Petitions to the Virginia legislature reported that the summers of 1793 and 1794 "were so unfavorable that the Hands employed in the River above the Great Falls were often driven from their work by Rises of the Water." The summers of 1791 and 1792 proved equally "unfavorable" hindering construction efforts above the Shenandoah Falls. Ultimately the fluctuation of the Potomac's water levels would prove the making of the project, but the directors viewed these early complications as temporary.<sup>11</sup>

More pressing were the difficulties and expense related to labor recruitment, both of local hands and of experienced technical leadership. Here was the third problem which would persistently undermine the company's efforts during its first twenty years. Despite Washington's desire to utilize free laborers, the directors were soon forced to turn to slave labor

The company faced a problem familiar to many employers in the early republic. Labor, as contemporaries noted, was in short supply and costly. Harry Toulmin, for example, praised America for its high wages relative to Europe during his stay in Virginia and Kentucky in the 1790s, "in country," he concluded, "affords better encouragement for mechanics of every description." Likewise, Charles Jones, another English traveler in the early republic, noted the "high price of labor" in the United States, but lamented that wages "absorbed . . . every unexploited profit." During a visit in the District of Columbia in the early 1800s, David Warden, had similarly noted that employers found it "difficult to procure white servants" because their "wages are high." Adam Smith had noted the same phenomenon in 1776, and attributed the scarcity of labor and high wages of North America to the plenty of land which can "be had for a trifle." The "disproportion between the great extent of the land and the small number of the people," Smith argued, pushed wages upward so that in America "the wages of labour . . . are much higher . . . than in any part of England."<sup>48</sup>

Under these economic conditions, it was almost certain that the company's early attempts to procure white wage laborers would fail miserably. The directors found it particularly difficult to recruit workers during harvest and planting seasons when labor demand was highest. In addition, the superintendent of the company's works (James Ramsey) was unable to control those who were employed. The directors turned to Irish

redeemed servants in September 1785, but this labor force proved equally unsatisfactory when large numbers of servants ran away at the first opportunity. In September 1785 Johnson, after consulting with Thomas Sun Lee, concluded that the company should hire slaves: their "labour," he asserted, "will be more valuable than that of common white Hindlings." Seven years later he remained convinced of the efficacy of slave labor: "The labour of the Potomack Company," he wrote, "is best performed by Negroes Slaves." Not only were such laborers easier to control, but unlike wage laborers their "services may be depended on in all seasons of the year."<sup>10</sup>

Resorting to black slaves solved one aspect of the company's labor problems, but the obstacle of finding skilled labor and a competent engineer to direct the company's operations still remained. As the directors would soon discover, the new nation possessed few skilled engineers or artisans able to construct a project as complicated as that envisioned by the Potomack Company. Not until early nineteenth century did a pool of American talent emerge: men who had been trained by the British engineers who oversaw the failed projects of the 1780s.<sup>11</sup> Thus, when the directors placed advertisements in *Alexandria*, *Baltimore*, and *Philadelphia* newspapers in May 1786 requesting "a Skilled Person to conduct the opening and improving the Navigations of the Potomack," they found that "no person with proper credentials" had applied by early July. The directors decided to adjourn for two weeks in the hope that someone with "Sufficient

'Testimonials of Capacity and Integrity' might offer their services. When they met on July 14 one new man, James Ramsey of Berkeley County, had offered himself for the job. The directors quickly named Ramsey as superintendent, and decided upon Richardson Stewart of Baltimore as assistant manager. Ramsey was to receive a salary of £200 Virginia currency per year, and Stewart £125.<sup>40</sup>

The directors placed great importance upon having an experienced superintendent for the project because they had little practical experience with the problems of river navigation or the construction of locks and canals. Johnson, for example, noted he had "no learning" in the field of canal and lock navigation, and lamented his lack of "Books on the subject." Washington, too, "confessed an entire incompetency" in regard to the proper route and design of the canal and locks at Great Falls. This lack of "practical knowledge" induced Washington to acquire widely among his correspondents both in America and overseas for a suitable engineer throughout 1785. Only when these queries and the job advertisements failed to attract a suitable candidate did the directors settle upon Ramsey.<sup>41</sup>

In offering the job to Ramsey, Washington noted that he had "implied a very favorable opinion" of Ramsey's "mechanical abilities." During Washington's tour of the west in September 1784 he had met "the ingenious Mr. Ramsey" in both and been shown a "Model of a Boat . . . for ascending rapid currents by mechanism." The "pole boat" or "steamboat"

was powered by a water wheel turned by the river's current. The water wheel was connected to a crank in the boat upon which were several rotating poles that projected through the hull. These poles pushed against the river bottom, and propelled the boat against the river's current.

Washington was impressed by the demonstration, and used his influence to secure the passage of an act in the Virginia legislature which gave Rumsey the exclusive right to use his mechanical boat in the waters of Virginia for ten years. For Washington the mechanical boat offered "the greatest possible safety in inland Navigation," particularly upon the newly cleared Potomac.<sup>10</sup>

Yet if Washington was impressed with Rumsey's "genius," he still doubted that the inventor had the engineering talent necessary to direct the construction of the Great Falls. For example, the directors, without consultation from Rumsey, determined the route of the canal around the Great Falls in March 1794.<sup>11</sup> Moreover, Washington never relinquished his search to find a "good Engineer" with experience in the construction of canals. In late March he asked James Brindley, the manager of the Chesapeake and Company and nephew of the famous English canal engineer of the same name, to examine the route chosen by the directors for the canal at Great Falls. Brindley expressed his approval of the track, though he requested "a good deal of attention and judgement . . . in fixing Locks there."<sup>12</sup> Given the directors' lack of expertise in the difficult question

Washington was convinced that Bradley should be engaged by the company to "digest a plan for Laska" at that Great Falls.<sup>17</sup>

Though the company never hired Bradley, the report to outside experts criticized Ramsey. He was not fit the task of managing the labor force of the company. In early July Ramsey resigned as superintendent and the job was given to Richardson Stewart. Ramsey complained of "the pay and emoluments which had been allowed him," but his decision to leave the company's employ probably had more to do with the frustrating managerial tasks he faced in addition to his technical responsibilities. Ramsey complained that "the task of paying and settling [had] so many serious [and] dull upon me. [It] is very [unpleasant] and what I was at first informed I should not have to do."<sup>18</sup> The labor strife he faced complicated his duties.

Not only was Ramsey confronted by rebellious workers who "ruined and closed" their boss, but Ramsey's assistant Stewart, actively attempted to undermine his authority. Though the directors originally dismissed Ramsey's allegations regarding Stewart's misconduct, in June 1892 they decided to discharge Stewart in order to "protect the Company's Interest."<sup>19</sup> The directors alluded to "Charges" made by employees and contractors against the new superintendent, but never specified their nature. However, Ramsey had been quite specific. He accused Stewart of mechanical incompetence, dishonesty and misrepresentation of Ramsey's product and character, associating with and employing disreputable characters, using

treatment of the company's laborers, and promoting conflict with neighbors of the company's works. Washington had scoffed at the charges in 1790; Stewart's subsequent conduct changed his mind. In addition, the continuing financial problems of the company restricted the directors they could afford to employ only one manager.<sup>45</sup>

Stewart was replaced by his former assistant James Smith whom Washington declared "the most competent of the two." Over the next seven years Smith oversaw the construction of the canal and locks around the Little Falls and the continuing work at the Great Falls. Nonetheless, in December 1795 the directors called Christopher Myers, an English architect with experience in canal construction, the position of manager of the company's works at a rate of £1000 a year. In early January Myers accepted the offer.<sup>46</sup> Smith's previous record as director reflected the poor approval William Weston had given the company's canal at the Great Falls in early 1795. The directors had wanted Weston, an English engineer who was overseeing the construction of the Chesapeake and Schuylkill Canal Company, to assist the works on the Potomac River as early as July 1794. They had little response until Washington, who had resigned as president of the Potomac Company in 1790, convinced the directors of the Chesapeake canal to allow Weston to travel to northern Virginia. After examining the river Weston expressed his "warmest approbation" of the skills of the company's undertakings. At the Great Falls, however, he recommended

that the canal route chosen by Smith be abandoned. The directors followed Weston's advice, despite the fact that "considerable progress had been made in making some of the lock works" along the line chosen by Smith. Because of the financial pressures faced by the company, Smith had selected a route designed to save "the expense of one of the locks." Such considerations, however, were disregarded in light of Weston's advice. Weston noted, "Washington, was 'a judicious man' who united 'both theory and Practice.'" In contrast, Smith, his Ramsey and Stewart before him, had only practical knowledge "mastered through trial and error."<sup>10</sup>

The lack of confidence the directors demonstrated in their managers, in combination with a desire to save costs, dictated their decision to engineer out considerable portions of the work clearing the river. In 1793 and 1794, for example, the company reached agreements with Thomas Beall and Edward McCarty to clear the river above Williamsport, Maryland. The contractors were required to meet the standards for navigation specified in the legislation creating the company, and were to be paid on installments as they completed the work. In addition, the contractors were directed to "take every Advantage and open the Navigation as near the bed of the River as was practicable." Smith and George Gilpin, one of the directors, examined Beall's and McCarty's work in early 1793 and were satisfied that it was proceeding speedily. In fact, the directors reported in September 1793 that "they expected the river above Williamsport to be cleared by the fall of 1794.

By 1796, however, the estimated portions of the river remained unaltered, and relations between the company and the company had cooled considerably. Beall feared "by Experience" that the directors' instructions were faulty. In order to make the river navigable he was obliged to "Secure the Navigation from the head of the River" and construct channels "near the Shores in many Places." The necessary changes entailed "Double the work" and cost. However, the directors refused to examine the river or pay him any more money until he completed all the work.<sup>17</sup>

The dispute between the company and Beall persisted into 1798. Beall continued to request more funds to finish the work, and the directors refused to forward any more money until the work was completed according to the contract. A review of Beall's work in 1796 by company officers reported that at least another £2000 would have to be spent before the river was completely navigable. A report made by a third party in 1798 acknowledged that "a good Deal of Work . . . hath [sic] in opening the Stone & Removing Logs[,] stones & clearing several Bed of Rocks" had been undertaken on the river, but there were still "Many places [sic] that Cannot be passed any Better Now than Before there was any thing Don [sic]."<sup>18</sup> The dispute was settled only in September 1798 when the company released Beall and McCarty from their contracts, and in return the contractors agreed that they would receive no additional payments beyond

the *SHUTTLE* already collected. Attempting to construct out the work, then, proved a failure.<sup>22</sup>

In 1795, however, such problems appeared surmountable, for the first time the company engaged the services of an experienced engineer. It was Washington who first brought Myers to the directors' attention. The success of the project, he asserted, depended "upon the skill, industry & other qualifications" of the engineer. Thus, on November 1795 he wrote to Thomas Lear, a director of the company since September 1794, that Myers, who had worked on the Lancaster canal in England, was in Philadelphia and without employer. Washington added that Myers's "ball and angle" "testimonies" made it unlikely that he would "remain long unemployed." The company jumped at the opportunity to finally employ a qualified manager. The hire of Myers, Lear believed, would ensure that "system and economy will prevail in their [the company's] works."<sup>23</sup>

Unfortunately, Myers failed to live up to the company's expectations. Though the directors raised his salary to \$1600 in September 1796, they refused Myers's request of an additional \$1000 and less than a year later they found sufficient reason to fire him. Though Myers possessed the practical knowledge of canal construction that the company desired, his managerial skills left much to be desired. The directors complained that Myers failed to maintain "proper and reasonable Correspondence" with them, that he was frequently absent from his post in the Great Falls, that

be failed to supply "proper working plans" to the men in his employ, and that he did not inspect materials for which the company contracted. As a result, Myers had incurred "a great and unnecessary Expenditure of Money -the work retarded and, probably in many instances improperly executed." In May 1791 the directors fired Myers, and one month later hired Leonard Harbrough, a Georgetown engineer who had overseen construction at the Little Falls canal, to replace him.<sup>17</sup>

In Harbrough, the company finally found a manager who combined competence in canal construction with managerial ability. As Harbrough pointed out in his letter of appointment, he had worked for the company for two years "without any [sic] Complaint of My Conduct or Fault of My Work that Ever Came to My hearing." The directors would have little cause for complaint over the course of the eight years Harbrough managed the company's works. Though his tenure as manager was interrupted by the company's financial problems in 1798, under him the canal and locks around the Great Falls were finally completed in early 1806. Harbrough demonstrated the necessary methodical ingenuity, the ability to mobilize effectively his motley labor force and scarce materials, and the reasonableness to work within the financial constraints of the company. Indeed, so pleased with Harbrough's efforts were the directors of the company that in August 1804 they presented him with a one quard "Silver Cup" "in consequence of . . . [his] Services . . . in opening the interior

navigators of the Potomack River as Superintendents of the Works generally, and more particularly on account of the useful improvements made by him."<sup>12</sup>

Thus, the company eventually resolved its labor problems. However, even after Bladenburgh had been retained as superintendant ongoing financial and technical obstacles hindered completion of the project. By late 1781 the company had expended all the money raised by the first and second stock issues. In June 1786 the directors temporarily discharged Bladenburgh because the "Treas of the Company would not consent of engaging hands to go on with the work." Over the next year and a half the directors scrambled to raise additional funds without issuing more shares which would lower the value of the existing shares and create "a heavy surplus." To this end, they sent a petition to the Virginia legislature requesting that the company be permitted to collect tolls on the portage of the river that had been cleared. The Virginia legislature quickly approved the request and in the spring of 1788 toll collections were being made at three spots on the river – at the Little Falls above the Great Falls and at the Conococheague River above the Shenandoah Falls. In August 1788, however, the directors reported that only \$288.60 had been collected in the previous year. Over the course of the next twenty-five years the company collected a total of \$228,127.67 in tolls, but this amount paled in comparison to the \$150,000 expended trying to make the Potomac navigable. Because the sum remained open to

navigators in few days each year) tolls provided another no certain solution in 1795 nor ensured the company's long-term financial stability.<sup>19</sup>

To overcome the immediate financial crisis the directors sought other alternatives. In 1797 bank loans totaling \$4,000 were obtained from the Bank of Columbia and Alexandria. However, at a general meeting held in February 1798 the directors noted that these loans were due "in a very short time" and that it would take another \$40,000 to complete the canal and locks at the Great Falls. In order to assure this was the February meeting authorized the directors to mortgage up to 100 shares belonging to individual shareholders in order to provide collateral for a loan of "United States stock or Cash." By June this scheme had raised some \$4,000 "of six per cent Stock of the United States," still well short of the capital needed to complete the project. In August the general meeting authorized the directors to "mortgage the Toll" of the company in order to obtain loans from Dutch or New York sources.<sup>20</sup>

A year later, however, the directors reported that loans totaling only \$4,040.00 had been obtained. Few bankers, they noted, were willing to loan money to the company without "the Guarantee of Book Loans" by Virginia or Maryland. As a result they continued, "the principal work of the Company has been at a stand" the past year. Since toll-taking still was estimates of the locks and canals at the Great Falls indicated that it would now take close to \$60,000 to complete the work. Short of a new source of stocks, the

directors offered a single option. Stockholders were requested to make a further advance of £100 upon each share they owned. Apparently, few investors responded enthusiastically to this plea, for by the end of 1799 the directors had decided to issue new shares.<sup>14</sup>

In December 1799, left with no other option, the company asked the Maryland assembly to authorize and purchase a new issue of 120 shares valued at £100 sterling each. After bitter debate in the legislature the company's request was granted. In total, the third stock issue amounted to over \$75,000, and with its purchase the state of Maryland owned 320 of the company's 720 total shares. With this money the directors were able to re-hire Hartough and complete the locks and canals at the Great Falls. The company announced in February 1800 that the Potomac was open from Fort Cumberland to the Tidewater, and the following August paid a dividend of 2 percent to each shareholder. Both openings appeared well placed for in the year following the opening of the canal at Great Falls, nearly 500 boats traveled down the river and the company collected over \$5,000 in tolls.<sup>15</sup>

Within a few years, however, the "unpredictable" (to use Franklin's term) nature of the Potomac, in particular, the river's fluctuating water levels, again threatened the financial viability of the company. All the tolls collected after 1800 were plowed back into improving the bed of the river and the rebuilding the canals and locks. For example, three wooden locks at the Little Falls and one at the Great Falls had to be replaced with more

permanent locks constructed of bricks. In addition, many of the structures built on the bed of the river designed to direct the flow of the water the way walls and dams rapidly eroded when the river flooded. Indeed, as Mason admitted in 1806, work on the river bed of the Potomac was an ongoing process. Into the 1830s the company was rebuilding locks and canals, clearing channels of debris, and reconstructing structures in the water.<sup>26</sup>

The directors' decision to expand work on the tributaries of the Potomac after 1803 complicated matters. This reflected a significant reorientation of the project, which had been originally designed to link the Potomac to the waters of the Ohio. As this goal grew ever more distant, however, the company decided to concentrate its resources on the Potomac watershed. As the directors noted in 1803 the work of clearing the tributaries of the Potomac "is highly important to the interest of the Community and of the Potomack Company."<sup>27</sup> The most elaborate of these secondary projects was opening the Shenandoah. As early as October 1790 the company had requested permission to "apply any of the Capital subscribed and Tolls" collected to "the opening[,] improving and extending the Navigation of the Branches of Potomack River." The directors attempted to contract out the work on the Shenandoah in 1793 and again in 1795 but both efforts failed. Frustrated with finishing the canal and locks at the Great Falls, the company undertook little work on the Shenandoah beyond surveying the river. Thus, when Ferdinand Fendler, a Berkeley

County planters approached the company in 1799 and proposed organizing a new post-stock enterprise which would assume the Potomac Company's rights to the Shenandoah in return for clearing the river; the directors accepted the offer.<sup>10</sup>

Within three years, however, the Shenandoah Company had failed and its efforts to clear the river deemed "ineffectual." In late 1800, with the work at Great Falls close to complete, the Potomac Company asked the Virginia assembly for authorization to resume its efforts to clear the Shenandoah River; in January 1802 permission was granted.<sup>11</sup> After surveying the river, the directors determined that five canals and locks would be necessary to remove all obstructions. They hoped that clearing the Shenandoah would increase the volume of traffic on the Potomac and the tolls of the company. Unfortunately, the work on the Shenandoah depleted the company's resources without providing an adequate return. Like the Potomac the navigation of the Shenandoah remained unworkable in dry seasons and the works of the company subject to constant destruction through flooding. Thus, though the company's toll collections continued to run—posting at \$22,542.89 in 1812—they remained insufficient to support maintenance work on the Potomac and construction on the Shenandoah. Forced ultimately to borrow heavily, the company went over \$175,000 by 1826. An attempt to raise \$300,000 through an ill-fated lottery scheme that began in 1806 did little to benefit the company's financial fortunes. Eight

profits and two drawings later the history had netted the company a mere \$488.00.<sup>100</sup>

The Potomac Company's efforts to open the rivers of the Potomac watershed to year-round navigation can only be considered a failure. The Potomac river became a regular route to the Ohio country (as Washington had originally envisioned) and even when water levels remained stable, the river was free from impediments only three months in each year. Moreover, the company never turned a profit for the shareholders and ended life burdened with a formidable debt. Still, over the course of its life, farmers shipped an estimated \$5,500,000 worth of produce down the river to Alexandria, Georgetown and Washington. In fact, between 1800 and 1850 the quantity of flour transported down the Potomac amounted to nearly 85 percent of the total flour exported from the port of Alexandria. Equally suggestive is the fact that between 1800 and 1850 the total value of goods shipped down the Potomac represented almost 38 percent of the value of all exports from the District of Columbia (Alexandria, Georgetown and Washington).<sup>101</sup> Clearly the project enabled many local farmers and planters to gain access to markets from which they might otherwise have been too distant. And the \$700,000 the company spent in its lifetime went extensively toward the local economy. All construction materials, supplies of food and drink, and labor the company needed were contracted locally; money that was expended directly into the economy of northern Virginia. In

inhabitants: the promise of river navigation contributed to the rise in land values that occurred in northern Virginia. Indeed, starting in the 1780s sellers of land made frequent reference to the way in which the Potomac navigation enhanced the value of property by allowing easier access to markets.<sup>22</sup>

It should also be noted that the collapse of the Potomac Company in 1802 did not terminate the attempt to establish a water navigation through the Potomac River valley. The Chesapeake and Ohio Canal Company, headed by Charles Foster Mercer of Loudoun County, assumed the rights to the river, assets, debts, and property of the Potomac Company in 1803. Like the earlier effort, the new enterprise sought to link the interior of Virginia and Maryland with the Ohio River. The technical problems encountered by the Potomac Company, however, convinced the directors of the C & O of the need for a still-water canal. Thus, the Potomac Company represented an important initial step in the development of a canal network in the United States.<sup>23</sup>

Still, the ultimate significance of the Potomac Company lies not in its economic or technical contributions to the early republic. The widespread enthusiasm the project engendered throughout the region in the wake of the Revolution (and continued to generate well into the nineteenth century) reveals that a belief in the benefits of economic development and market penetration pervaded the population of northern Virginia. Though direct

investment in the Potomac Company was beyond the demands of the vast majority of farmers in the region, when the river was opened large numbers jumped at the opportunity to obtain this source of trade. Rather than seeing market production as a threat to their livelihood, the farmers of northern Virginia saw it as an opportunity and they embraced the technological means which increased their well being. As George Galpin reported in 1776 after the road at Little Falls had been opened: "Great Quantities of produce come down the river from above . . . and the farmers are growing wealthy fast."<sup>10</sup>

### Notes

1. "A Farmer," *Virginia Journal and Alexandria Advertiser*, August 18, 1764.

2. Marc Rymel, *A Mighty Empire: The Origins of the American Revolution* (Ithaca: Cornell University Press, 1989), 87-100; Caren Evans Foster, *Early Charters in the Development of the Potomac Route to the West* (Washington: Colonial Historical Society, 1977), 8-18; Omer L. Nye ed., "Washington and the Potomac: Manuscripts of the Minnesota Historical Society (2794) 1749-1760," *American Historical Review* 85 (April 1980), 486-498; Douglas R. Littlefield, "Eighteenth-Century Plans to Clear the Potomac River," *Yankee Magazine of History and Geography* 59 (July 1944): 326-328. Group and his partners placed newspaper advertisements calling for subscriptions to clear the Potomac in the *Marshall Gazette*, February 13 and June 10, 1763 (they are reprinted in Edward S. Delaplane, *The Life of Thomas Jefferson* (New York: Frederick R. Hitchcock, 1877), 43-44).

3. John Temple's Proposals for Clearing the Potomac, "Washington and the Potomac," 402-503 (all for Clearing and Making Navigable the River Potomac, *ibid.*: 503-504) and Temple to Washington, January 8, 1773, *ibid.*: 504-505. See also, David Curtis Skaggs, "John Temple and the Development of the Potomac Valley," *Yankee Magazine of History and Geography* 59 (July 1954): 322-328 and Littlefield, "Eighteenth Century Plans," 324-325.

4 Johnson to Washington, June 18, 1770; Maryland Subscription Paper, [1770], book no. "Washington and the Potomac," 585-613. See also, Washington to Johnson, July 28, 1770, John C. Fitzpatrick, ed., *The Writings of George Washington, 1745-1799*, 29 Volumes (Washington: Government Printing Office, 1961-1944), 3: 17-20; Bacon-Poore Early Chapters, 1764, Littlefield, "Eighteenth-Century Plans," 288-296 and Delaplante; Johnson, 67-72. On the switch from tobacco to wheat and the rise in grain prices, see Chapter 2.

5 Bruce Porter, Early Chapters, 24-25; Delaplante; Johnson, 70-74; W.W. Hening, ed., *The Statutes at Large, Being a Collection of all the Laws of Virginia, 13 Volumes* (Richmond: New York and Philadelphia, 1820: 1823), 8: 570-571; John Frederick Kennedy, ed., *Journals of the House of Burgesses of Virginia, 1776-1778* (Richmond: 1904), 285-291; Washington to Jonathan Boucher, May 4, 1773; *Writings of Washington*, 3: 60. See also Washington to Thomas Jefferson, March 28, 1764, [ibid.], 27: 374-375; Randal Mackin, *Emancipator*, 325-26, 287; and Littlefield, "Eighteenth-Century Plans," 302.

6 Washington to Johnson, May 5, 1773; *Writings of Washington*, 3: 60; Skaggs, "John Skaggs," 265-270, 283; Richard Henry Lee to Thomas Jefferson, November 5, 1776; Richard Henry Lee Papers [1776-1784], Alderman Library, University of Virginia, Charlottesville, Virginia (hereafter UV/L); "Mr. Jas. Ballendhorne Plan & Proposals Preceding to the Passing Act of the Assembly [1774]," Broadside, [1774]; and "Mr. Jas. Ballendhorne Estimate of the Expence of Opening ye Navigation of Potomack River [1774]," Broadside, [1774], Alderman Library, University of Virginia, Charlottesville, Virginia (hereafter UV/L). See also Bacon-Poore Early Chapters, 24-26, and Littlefield, "Eighteenth-Century Plans," 302-303.

7 The Virginia traders were George Washington, George Mason, Thompson Mason, Bryan Fairfax, Daniel McGarry, John Curbin, John Dalton, William Ramsey, Robert Adams, William Sibbey, John Hough, Joseph Janney, Israel Thompson, Samuel Washington, Adam Stevens, Isaac Egan, Robert Richardson, John New, Thomas Richardson, Abram Ellis, and Joseph Mead. All were prominent planters or merchants from the upper northern neck. The Maryland agents were Thomas Johnson, Laurence Jacques, Daniel Carroll, David Kim, Robert Poore, John Mardock, Thomas Richardson, Thomas John, William Beckins, Adam Stewart, Richard Thompson, John Harmon, Charles Bessy, William Bessy, John Cary, Jacob Young, James Marshall, Daniel Hight, Samuel Hughes, Thomas Gump, Jonathan Hagar, and John Scott. Georgetown merchants and Frederick County planters and owners also dominated the list, see, Ballendhorne Plan and Proposals, "Virginia Gazette (Shenandoah), January 14, 1770; John C. Fitzpatrick, ed., *The Writings of George Washington, 1745-1799*, 4 Volumes

Orion: Benjamin Mifflin Company, 1986), 3: 154 (December 25, 1776); Mason to Washington, February 17 and March 5, 1776, Robert A. Rutland, ed., *The Papers of George Mason, 1728-1793*, 5 Volumes (Chapel Hill: University of North Carolina, 1970), 1: 221-222, 224-226; Delaplane Johnson, 78-79.

9 Mason to Washington, March 5, 1776, Mason Papers, 1: 224-226; Kennedy, ed., *Journals of the House of Burgesses of Virginia, 1773-1778, Including the Records of the Committee of Correspondence* (Richmond: 1980), 181, 228-243, 274; Hugh H. Taggart, "Old Greensboro," *Records of the Colonial Historical Society* 11 (1906), 176-179; Johnson to Washington, January 28, 1776, quoted in Delaplane Johnson, 78-80; see also, 78-81; *Washington Journal* 3: 140 (January 28, 1776).

10 Washington to Johnson, July 28, 1776 *Estimates of Washington*, 3: 16-17.

11 Thomas Jefferson to Washington, March 15, 1784, John F. Boyd, ed., *The Papers of Thomas Jefferson*, 62 Volumes to date (Princeton: Princeton University Press, 1960), 1: 7-25-26. The northern route to which Jefferson referred involved traveling up the Cayohoga River to the Great Lakes, through the lakes to the George River at the western end of Lake Ontario, down the George to the Mohawk River which flowed into the Hudson River above Albany, and down the Hudson to New York City.

12 Washington to Jefferson, March 25, 1784, *Washington-Writings* 27: 304-319. In contrast, in January 1782 when Washington received a letter from Christopher Colles, an Irish engineer then resident in Morristown, New Jersey, outlining a plan to clear the obstructions in the upper Ohio River, he recommended that Colles turn his attention to "works of more immediate public utility." See Walter W. Rostow, ed., *A History of the People of the United States of America, 1789*, by Christopher Colles (Cambridge: Harvard University Press, 1964), 21-22.

13 *Virginia Journal and Miscellaneous Adventures*, April 18 and August 15, 1784. Washington's diary of his 1784 western trip is found most readily in *Estimates of Washington*, 3: 379-328 (September 1-October 4, 1784) [quote, 275-280]. The journal is also reprinted in *Arthur H. Clark Redburn: Washington and the West Cleveland: Arthur H. Clark Company, 1912*, 27-28. See also John Seelye, *Scoutship Machine: Fronts and the Republicans Era, 1755-1825* (New York: Oxford University Press, 1995), 69-69, Delaplane Johnson, 387-389.

14 *Estimates of Washington*, 3: 315-328 (quote 315, 326, 327).

14. *Ibid.*, 2: 335-335 (October 4, 1784, Washington to Benjamin Harrison, October 15: 1784 *Writings of Washington*, 57-472.

15. Washington to Harrison, October 20: 1784 Washington to Johnson, October 15: 1784 and Washington to George Plater, October 25, 1784. *Ibid.*, 27: 471-488-488-482-484.

16. *Virginia Journal and Alexandria Advertiser*, November 25, 1784. The meeting held on November 15 was announced in the November 4 issue. December 4, 1784. *Alexandria City Legislative Petitions, 1776-1805*. Library of Virginia. Referred Virginia Resolutions (LVR). An identical petition was forwarded to the Maryland legislature by Thomas Johnson.

17. The best accounts of Washington's decisive efforts to secure passage of the Potomac Company bill before the 1784-1785 sessions of the Virginia and Maryland legislatures are found in his letters, and James Madison's description of the events after the fact. See Washington to Dorothy Randolph, December 25, 1784. *Writings of Washington*, 58: 15-16. Washington to Morgan de Lafayette, December 25, 1784. *Ibid.*, 58: 17. Washington to Madison, December 25, 1784. *Ibid.*, 58: 18-20. Washington to the General Assembly of Virginia, December 28, 1784. *Ibid.*, 58: 20-21. Washington to the "Secretary of War" (Henry Knox), January 5, 1785. *Ibid.*, 58: 14-15. Washington to Johnson, January 12, 1785. *Ibid.*, 58: 15. Madison to Johnson, January 5: 1785. Gifford Hunt, ed., *The Writings of James Madison*, 9 Volumes (New York: G.P. Putnam's Sons, 1899-1902), 2: 100-101. See also, Norman K. Risjord, *Chesapeake Politics, 1783-1800* (New York: Columbia University Press, 1976), 280-284, and Hanco Parker, *Early Chesapeake*, 64-61.

18. Madison to Johnson, January 5: 1785. *Writings of Madison*, 2: 104-105. Patrick Henry to Washington, June 30: 1785 and January 18, 1785. George Washington Papers. Library of Congress, Washington, D.C. Gifford LCI Risjord, *Chesapeake Politics*, 242-244-247, Walter S. Gausler, Jr., *The Great National Project: A History of the Chesapeake and Ohio Canal* (Baltimore: Johns Hopkins Press, 1944), 15-31-32. Philip Morgan, *Men, Material Imperatives in Virginia, 1775-1800*. Ph.D. Dissertation, University of North Carolina at Chapel Hill, 1996: 4-6, 74-75, 80-84. Arthur G. Brown, *History of the Potomac Canal, Maryland* (Williamsburg, VA: Shenandoah Historical Society, 1976), 18. On regional conflicts in Virginia more generally, see Charles R. Andler, *Sectionalism in Virginia, 1776-1861* (Chicago: University of Chicago Press, 1952). The various acts can be found in W.W. Hening, ed., *The Statutes at Large, Being a Collection of All the Laws of Virginia, from the . . . Year 1607*, 12 Volumes (Philadelphia: New York, and Philadelphia, 1809-1812), 11: 518-525 (The Potomac Company), *Ibid.*, 11: 550-551 (The James River

Company], and [sig.], 11, 333-334, and 33, 478-484 [Donald Swamp Company]. On the early history of the James River navigation see, Weyland Fuller Dancyer, *History of the James River and Kanawha Canals* (New York: Columbia University Press, 1922, 2-47) the first years of the Donald Swamp canal are detailed in Alexander Crosby Brown, *The Donald Swann Canal* (Chesapeake, VA: Norfolk County Historical Society, 1870-1876).

19. *Having Statutes at Large*, 11, 510-520.

20. *Virginia Journal and Alexandria Advertiser*, February 10, and April 28, 1780; *Madison to Jefferson*, April 17, 1780; *Washington to Madison*, 2, 127.

21. *Virginia Journal and Alexandria Advertiser*, April 14, May 13 and 28, 1780; General Meeting of May 13, 1780, *Records of the Potomac Company*, Letter Book, 1780-1786; National Parks Service, Record Group 70, National Archives/ Washington, D.C. (hereafter NA). The fifty shares were purchased for Washington by the state of Virginia in recognition of his wartime service and his "instrumental" role in establishing American independence, see: *Having Statutes at Large*, 11: 520-526. Washington refused to accept the shares and they were "appropriated to such objects of a public nature" as Washington should in future direct. See, *Washington to Hercules*, January 22, 1780; *Journal of Washington*, 26, 34-35; *Washington to Henry*, February 22, 1780; *ibid.*, 35-36 and *Having Statutes of Virginia*, 12, 43-44. Appendix 2 provides a full listing of all investors and the number of shares they purchased. The company requested that Congress be allowed to purchase shares in late 1786, see, *Petition of the Potomac Company*, November 2, 1790, *Miscellaneous Legislative Petitions, 1790-1800 LOP*, and *Having Statutes at Large*, 13, 187-188. By 1780 slave Americans in numerous firms had purchased twenty shares: Peter Skene Ogden (twenty-three shares), Isaac Trappe and Hendrick Vanhooken (thirty), Christian and Peter VanKlyen (fourteen), and Jacob and Nicholas Transshoren and Holland (eight) see, General Meeting of August 9, 1780, *Records of the Potomac Company*, Letter Book, 1780-1786, and *Records of the Potomac Company: Records Concerning Transfers of Shares of Stock, 1784-1808*, National Parks Service, Record Group 70, NA.

22. See Appendix 2 for details. In addition, sixty-one (or 12 percent) of the Virginia investors were planters (ten or more slaves) or farmers (eight (7 percent) professionals, and one unknown).

23. General Meeting of May 13, 1780; *Records of the Potomac Company*, Letter Book, 1780-1786 and Meetings of the Directors, May 20

and 21, 1785. *Records of the Potomac Company, Proceedings, 1785-1807*, National Parks Service, Record Group 79, NA.

14. *Foreign Statutes at Large*, 1: 520-524; *Memorials, Petitions and Commercial Intelligence*, February 8, 1788; *Minutes to Albert Gallatin*, January 25, 1808. *Records of the Potomac Company, Correspondence and Reports, 1785-1811*, National Parks Service, Record Group 79, NA. Moore's report on the company's progress was incorporated into Gallatin's "Report on Roads and Canals," *American State Papers, Documents, Legislation and Executive of the Congress of the United States*, Class 33, Miscellaneous, 3 Volumes (Washington: Order and Series, 1839), 1: 585-588. The company's petition to the Virginia legislature detail the requests for further tax: see, *Potomac Company Petitions*, November 5, 1788, November 2, 1790, November 4, 1793, November 15, 1796, December 15, 1798, December 15, 1800, December 23, 1801, December 10, 1810, and December 5, 1813. *Miscellaneous Legislative Petitions*, LOV. These attention requests were eventually granted: see *Foreign Statutes at Large*, 11: 408-409 (1793), 10, 187 (1795), and *Shepherd, Statutes at Large*, 1: 528 (1794), 3: 77 (1798), 212 (1803), 445 (1808), 1: 558 (1804), 854 (1805).

15. *Potomac Company Petition*, November 15, 1793. *Miscellaneous Legislative Petitions*, LOV. Douglas E. Littlefield, "The Potomac Company: A Misadventure in Financing to Early American Internal Improvement Project," *Business History Review*, 38 (Winter 1964): 505-509. In May 1783 John Augustine Washington wrote to the commissioners of the Potomac Company, William Harrisborne and John Fitzgould, that he had decided to purchase additional shares (he had already subscribed for and after reflecting "that some time must necessarily be employed [sic] in getting us prepared for beginning this great work and that of course there will be no great demands made very shortly upon the Subscribers for Cash", Washington to Harrisborne and Fitzgould, May 2, 1783. *Records of the Potomac Company, Correspondence and Reports, 1785-1811*, National Parks Service, Record Group 79, NA.

16. In all there were fourteen calls for payment. In addition to the four already noted there were: September 7, 1787 (5 percent), March 15, 1788 (6.5 percent), September 26, 1788 (3 percent), March 26, 1789 (5 percent), January 24, 1790 (3 percent), November 1, 1790 (1.8 percent), November 28, 1790 (4 percent), March 1, 1793 (18 percent), March 1, 1794 (3 percent), October 14, 1794 (12 percent). By this latter date the first offering of shares were paid in full. See, *Meetings of the Directors*, May 21, 1785, March 7-8, 1786, August 7, 1786, January 5, April 5, May 14 and 21, June 25, and August 2, 1787, January and August 17, 1788, September 28, 1789, September 11, 1793, November 5, 1798, November 26, 1803, and July 14, 1794. *Records of the Potomac Company, Proceedings, 1785-1807*.

National Parks Service, Record Group 79 NA. See also, *Joint Stock Companies: Accounts and Correspondence, 1760-1791, 1795-1803*, Auditor of Public Accounts: LOV.

21 *Revolving Chesapeake Politics, 160-166* Richard B. Morris: *The Forging of the Union, 1763-1789* (New York: Harper & Row, 1967): 164-168 Jacob M. Price: *France and the Chesapeake: A History of the French Tobacco Monopoly, 1675-1763, and Its Relationship to the British and American Tobacco Trades* 2 Volumes (Ann Arbor: University of Michigan Press: 1978): 2: 798-847 Lislefield "Petioner Company," 565-575. Price data can be found in Appendix 1. In 1760 the Virginia legislature passed an act which enabled tobacco growing Petioner tobacco to pay their taxes in tobacco notes valued at 20s. for \$4.00 per hundredweight. see *Hening Statutes at Large*, 12: 564-569.

22 Washington to David Humphreys, February 3, 1780. *Washington's Exile*, 28: 60; see also, Washington to Marquis de Lafayette, February 15, 1780 and Washington to Jefferson, February 20, 1780 *ibid.*, 28: 70-75 William Allison to James Forten, February 1780, William and David Allison Letterbook, 1758-1793, William Allison Papers, 1757-1795: LOV, see also, *Barnes-Edelman Canal*, 4-5.

23 *Hening Statutes of Virginia*, 12: 560-565 John Joseph Walsh, *Early Banks in the District of Columbia, 1792-1818* (Washington: Catholic University of America Press, 1942), 15-26: 26-27. For more on early banks see Chapter 6. Reimburse of shares: General Meeting of Petioner Company, August 3, 1765. Records of the Petioner Company: Letterbook, 1759-1790; and Meeting of the Directors, December 22, 1766. Records of the Petioner Company, Proceedings: 1765-1687. National Parks Service, Record Group 79 NA. Shepherd, *Statutes at Large*, 1: 375-377 *Columbian Magazine and Alexandria Gazette*, August 15, 1766. *Stones sold*: *Memor to Gallatin* January 26, 1806. Records of the Petioner Company, Correspondence and Reports, 1755-1811, National Parks Service, Record Group 79 NA.

24 Petioner Company Petition, November 15, 1794. *Massachusetts Legislative Petitions*: LOV. The funds due by the subscribers on the second calling of shares were reflected in eight installments: February 26, 1795 (10 percent); April 22, 1796 (10 percent); July 1, 1796 (10 percent); September 1, 1796 (20 percent); November 1, 1796 (20 percent); January 2, 1797 (10 percent); March 1, 1797 (10 percent); and July 20, 1797 (10 percent). See *Joint-Stock Companies: Accounts and Correspondence, 1760-1791, 1795-1803*, Auditor of Public Accounts: LOV.

22 Sir Robert G. Gardin, "Causes and Consequences: Early Nineteenth Century Origins of the Environmental and Social Costs of Mining Activities," *North American Technology, Mining and Social Themes from the Colonial Era to 1850*, Judith McGrew, ed. (Knapel Hill, University of North Carolina Press, 1996), 240-242, who writes that "though devices" made and "local customs and usage" established when a technology is first introduced are often "difficult to alter at a later time."

23 December 4, 1794, *Alexandria City Legislative Petitions, 1778-1809*, LOY. The full extent of the Petoine Company's river projects are revealed most readily in letters to Gellatly January 26, 1805. *Records of the Petoine Company, Correspondence and Reports 1780-1831*, National Parks Service Record Group 78, NA, and Gellatly, "Report on Roads and Canals," 728-731.

24 Washington to Randolph September 16, 1795. *Writings of Washington*, 34: 263-266; see also Washington to Marquis de Lafayette, February 13, 1795; and Washington to Henry Lee, April 5, 1796, *ibid.*, 36: 73-74, 403-408. The Petoine Company's engineering methods are termed "stone navigation" in "Report of the Joint Commissioners on the Navigation of the Potomac River," (*Original House Journal Documents, 1822-1833* (Richard) Thomas Ritchie, 1833, 2:4. The best recent accounts of the technological aspects of the river project are, Ricardo Torres-Rouy, *Potomac Company Canal and Locks: Historic Structures Report*, Great Falls, Virginia (Washington: U.S. Department of the Interior, Division of History, Office of Archeology and Historic Preservation, 1976) Barnes, *Potomac Canal*, 24-49; Jo Anne Smith, "Historical Background for the Designation of the Great Falls Canal and Locks of the Potomac Company as a National Historic Civil Engineering Landmark," Unpublished Paper Presented at the National Meeting on Transportation Engineering, Washington, 1982, 14-28; and Littlefield, "Eighteenth Century Plans."

25 "To a Member of the Present Assembly Now visiting [and is] Annapolis [1774]," in "Washington and the Potomac," 518; *Largan Journal and Alexandria Advertiser*, December 26, 1794. John Phillips, *A General History of Island Navigation, Foreign and Domestic* (London: 1 and J Taylor, 1783) reveals the confusion of contemporary English writers regarding the best form of island navigation. Citing James Dendy, the famous English canal engineer Phillips noted "the difference in favour of canal navigation contrasted to that of a river" (26-27). Yet he later praised the efforts of the Petoine Company to clear the navigation of the Potomac River (246-256). Not all Americans agreed that river navigation was best suited to their country. In 1778 Benjamin Franklin, after touring the canals in Britain and Holland, concluded that "rivers are unmanageable things: especially in hilly countries, canals are quiet and very manageable".

quoted in Herman H. Stephenson, *The Transfer of Early Industrial Technologies to America* (Philadelphia: American Philosophical Society, 1987), 32.

36. Smith, "Historical Background," 27-28; "Report of the Joint Commissioners," 4-8; Avery Craven, *Ball's Blunderbuss: a Factor in the Agricultural History of Virginia and Maryland, 1606-1840* (Urbana: University of Illinois Press, 1930), 28. Benjamin Latrobe contended the Potomac could be navigated because they were subject to "the work of all the hills and masses of the north bank [of the Potomac]" and became clogged with "alluvium" (see Gallatin, "Report on Roads and Canals," 212). In 1808 Mason estimated that the "Annual Expenses of repairs & contingencies may ... be estimated at \$5,000 P. Annum," and that another \$100,000 would have to be expended before the river was completely navigable (see, Mason to Gallatin, January 20, 1808, Records of the Potomac Company, Correspondence and Reports, 1785-1811, National Parks Service, Record Group 78, NA).

37. "Report of the Joint Commissioners," 8-11 (see esp. 1-6); Smith, "Historical Background," 26-27 (Chesley quote); "Chesapeake and Ohio Canal," House of Representatives Report 255, 15th Congress, May 22, 1820, 26-104, 104-107; Lutzelsfeld, "Eighteenth Century Plans," 207-210; Gallatin, "Report on Roads and Canals," 725, 971 (for Latrobe's opinion); Seeley, *Remarkable Marriages*, 252-253. For an example of how engineering opinion changed in the early nineteenth century see Samuel Young, *A Treatise on Internal Navigation, Explaining the Principles by which Canals and their Accessories are best best Constructed, and Best in Repair* ... (Gallatin Spa, NY: U.F. Doubleday, 1807), 113-125. He described at length the "interruptions from floods and droughts, by which river navigations are tedious," and concluded that "artificial navigations" were much to be preferred. James Brindley, the English canal engineer, was the first to conclude that rivers "were crossed ... To land navigable canals" (see, Phillips, *Island Navigation*, 98).

38. The survey map of the Potomac in August 1782 is detailed in *Journal of Washington*, I, 304-404 (August 1-30); some of the decisions made by the directors of that trip would later be altered. The best contemporary descriptions of the works as completed are Mason to Gallatin, January 20, 1808, Records of the Potomac Company, Correspondence and Reports, 1785-1811, National Parks Service, Record Group 78, NA, and *Report of the Joint Commissioners*, Appendix B, 15-14. Company correspondence referred to these channels around Kearsy, Chesapeake and Mason's Falls as "locks." For also, Smith, "Historical Background," 23-15-26, and Mason to Foster, *Smith*, Chapter 85.

28 Potomac Company Petitions, December 8, 1788; November 25, 1789, and December 12, 1803, *Miscellaneous Legislative Petitions*, LCN. As late as November 1780 the directors still predicted "that the completion of the whole undertaking may be prosecuted on less than the capital proposed", see Potomac Company Petitions, November 2, 1779; *ibid.* Most of the company's requests were granted by the Virginia legislature, see Henry Statutes at Large, 12: 68-69 (1784), and Sherburne Statutes at Large, 1: 376 (1789). The legislature's clarification of the phrase "dry seasons" did not follow the directors' suggestion. Instead, an act passed in early 1803 noted "that the words dry seasons" . . . were and are to be interpreted and understood . . . all seasons as far as relates to the navigation of said river from Port Cumberland to tide water" see, *ibid.*, 1: 485.

29 Potomac Company Petitions, November 2, 1789, and November 2, 1790; *Miscellaneous Legislative Petitions*, LCN; see also Meetings of the Directors, November 26, 1788; August 7, 1788, and July 23, 1788, *Records of the Potomac Company Proceedings 1788-1807*; National Parks Service Record Group 70: NA; and Washington in John Fitzgerald, June 8, 1790, *Writings of Washington*, 28: 453-454. For contemporary reports of generally wet weather see *Virginia Journal and Alexandria Advertiser*, July 14, 1790, June 1, 1790, and May 21, 1790, and *Diaries of Washington*, 3: 49 (June 2, 1790).

30 Harry Toulmin, *The Western Country in 1793: Reports on Kentucky and Virginia*, Marcus Tieding and Geoffrey Himes, eds. (San Marcos, CA: Henry E. Huntington Library, 1962), 23: 180-191; Charles William Jones, *The Stranger in America, 1793-1806*, Carl S. Dewar, ed. (New York: Press of the Penguin, 1958; originally published London, 1807), 306; Samuel Beiler, *Wardens: A Chronographical and Statistical Description of the District of Columbia*, . . . (Paris: Smith 1804), 42-44, 52; Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* 2 Volumes, Edwin Cannan, ed. (Chicago: University of Chicago Press, 1976; edition originally published London, 1804), 1: 79-80, 2: 70-71. For other contemporary views, see: Harry J. Cossen, ed., *American Backcountry* (Port Washington, NY: Kennikat Press, 1970; originally published London, 1773), 52-53, 64-208; William Stoddard, *Observations on the Agriculture of the United States of America* (London: W. Palmer & Co., 1807), 22-26; Frank Cass, *A View of the United States of America*, . . . (Philadelphia: William Hall and Wright Bertram, 1794), 20-40, 42; and François Alexandre Petitot, *Journal de la République Française, Traversée Through the United States of North America, the Country of the Iroquois, and Upper Canada, in the Years 1795, 1796, and 1797*, . . . 2 Volumes, B. Newman, trans. (London: B. Phillips, 1799), 2: 53-54, who noted that a skilled whale whaler received between \$1.50 to \$2.00 per day in Albemarle

County, Virginia. Historians also note the high price of labor in the colonial period and the early republic (see Carol W. Pearsall, *The Machine in America: A Social History of Technology* [Baltimore: Johns Hopkins University Press, 1968], 26-37; Peter Way, *Common Labour: Workers and the Shaping of North American Canada, 1760-1860* [Cambridge: Cambridge University Press, 1990], 35-106; Ned Leach, *York: Mechanical Maintenance... Technological Change in Revolutionary America* [Westport, CT: Greenwood Press, 1985], 14, 39, 43, 51, 73, 104; *Becker's Bundle, Emulation, and Innovation* [New York: New York University Press, 1984], 21, 148; and Carl Beckwith, *The Colonial Craftsmen* [New York: New York University Press, 1966], 122-141).

41 Johnson to Washington, September 1765, quoted in Bacon-Pooley, *Early Chapters*, 78; see also Delephine Johnson, 104; Potomac Company Minutes, October 18, 1765; Miscellaneous Legislative Petitions, LOM. This petition requested that the company be allowed to carry slaves laboring on the Potomac River across state lines without penalty. The petitioners were concerned that the construction of the inland highways at Washington would increase the demand for slaves in Maryland and make it necessary to procure slaves in Virginia. On the Potomac Company's decision to use slaves see also Way, *Common Labour*, 39-45, 185-189. Way notes the increasing scarcity of skilled slave labor on the southern coast by the 1760s "to say . . . was using captured labour and slaves were becoming as much workers as slaves" (122).

42 On the question of the "transfer of technology" from Europe to America in general, and on water transportation in particular, see Pearsall, *Machines in America*, 35-69, 79-75; Frederick Thurner, *Transfer of Early Industrial Technology*, 12-17, 35-71; and Ronald E. Shaw, *Canals in a Nation: The Canal Era in the United States, 1780-1860* [Lexington: The University Press of Kentucky, 1989], 1-49. See also Kistner, ed., *History of the Roads*, 62, who notes that "qualified engineers . . . were a rarity" in America in the 1790s; and Le Roithmansack Leveson, *Travels Through the U.S.A. 1793*, who noted "in America . . . a total want of men of talents in the arts . . ." after visiting the Dismal Swamp Canal in northern Virginia.

43 Meetings of the Directors, May 30, July 1, and July 14, 1765; Records of the Potomac Company, Proceedings, 1765-1801, National Parks Service, Record Group 78; NA, *Diaries of Washington*, 3: 238 (July 1), 240 (July 14); *Virginia Journal and Alexandria Advertiser*, June 3, 1765.

44 Johnson to Washington, November 4, 1765; "Washington and the Potomac"; Washington to John Fitzpatrick and George Gilpin, March 11, 1766; *History of Washington*, 26, 101; Washington to Margaret de La Fayette, February 15, 1766; *ibid.*, 26, 79; Washington to Jefferson.

February 28, 1785, *ibid.*, 38-39; Washington to William Greyson, June 22, 1785, *ibid.*, 38-37; Washington to George William Fairfax, June 30, 1785, *ibid.*, 39-38; Washington to Lafayette, September 5, 1785, *ibid.*, 38-39; Washington to Richard Banfield, September 18, 1785, *ibid.*, 38-39.

43. Washington to Rumsey, July 2, 1785, *ibid.*, 38-39; *Diaries of Washington*, 2, 383-383 (September 4); see also 3, 327-328 (October 4, 1784); Petition of James Rumsey, November 5, 1784, Berkeley County Legislative Papers, 1776-1800, LCV, Among Statutes at Large, 11-300; Washington prepared a certificate, dated September 7, 1784, presenting Rumsey's invention; it is reproduced in *Writings of Washington*, 23-49; For descriptions of the mechanism of Rumsey's pole boat see, John Fitch, *The Original Steamboat Suspended, or, A Reply to Mr. Rumsey's Pamphlet* (Philadelphia: Zachariah Poulson, 1789), 1; Harold Kerstition and Jeremy, 33; Edwin T. Layton, "The Most Original," *American Heritage of Invention and Technology* 3 (Spring 1957), 58-60; and Layton, "James Rumsey: Pioneer Technologist," *Mississippi History* 45 (1998), 33-45. For more on Rumsey's inventions see Chapter 7.

44. *Diaries of Washington*, 2, 35-35 (February 28-March 2), Smith, "Historical Background," 39.

45. *Diaries of Washington*, 3, 35-36 (March 28-30); Washington to John Fitzpatrick and George Gilpin, March 24, 1786, *Writings of Washington*, 24-327-328; see also, Washington to Henry Lee, April 3, 1786, *ibid.*, 24-401-402; and Washington to William Moultrie, May 20, 1786, *ibid.*, 24-432. On Bradley see Marvin K. Roth, *Hager's Ferry, Army and the New Technology* (Baton Rouge: Louisiana State University Press, 1977), 24-28, and Stapleton, *Transfer of Early Industrial Technologies*, 44-48, 55.

46. *Diaries of Washington*, 3, 50 (June 4, 1790), 112 (October 2-3, 1790), 365-367 (June 2, 1790); Rumsey to Hartshorn, November 26 and September 30, 1793, *Records of the Patuxent Company: Correspondence and Reports, 1785-1815*; and *Meetings of the Directors*, October 2-3, 1790 and June 2-3, 1798, *Records of the Patuxent Company: Proceedings, 1785-1807*. National Parks Service, Record Group 79, NA. See also, Turner, *James Rumsey*, 50-60; and Lardfield, "Eighteenth-Century Plans," 212-214.

47. *Diaries of Washington*, 3, 302 (June 2, 1793); *Meetings of the Directors*, December 22, 1790 and January 2, 1798; *Records of the Patuxent Company: Proceedings, 1785-1807*. National Parks Service, Record Group 79, NA.

50. *Ibid.*, July 14, 1794. General Meetings of the Potomac Company, August 9, 1794, and August 6-1795. Records of the Potomac Company. Letterbook, 1795-1798. National Parks Service, Record Group 78, NA, Washington to Tobias Lear, December 22 and 23, 1794, January 3, 25, and March 4, 1795. Letters and Recollections of Washington (New York: Doubleday, Page & Company, 1900) 75-81, 82-83, 85-87, 88, 91 (quoted). See also Bruce Foster, *Early Chapters*, 89-93, and Littlefield, "Eighteenth Century Plans," 244-215. For Winthrop's career in America, see Stapleton, *Transfer of Early Industrial Technology*, 58-69.

51. Meetings of the Directors, October 3, 1799, May 8 and September 13, 1798. Records of the Potomac Company. Proceedings, 1795-1801, General Meeting of the Company, September 5, 1795. Records of the Potomac Company, Letterbook, 1795-1798. Draft to the Directors of the Potomac Company, August 2, 1795 (quoted). Records of the Potomac Company, Correspondence and Reports, 1795-1801, all in National Parks Service, Record Group 78, NA. In all, three contracts were made between Beall and the Potomac Company, dated January 7 and October 20, 1799 and January 21, 1798. See "Copy of Agreement Entered into between George Beall and the Board of Directors, July 3, 1798," *ibid.*

52. Meetings of the Directors, October 3-4, 1797, July 3, August 25 and November 4, 1798. Records of the Potomac Company. Proceedings, 1795-1801. Draft to the Directors of the Potomac Company, September 4, 1797. Directors of the Potomac Company to Beall, October 4, 1797. Memorandum of the Examination of the Work done by Capt. Beall on the Bed of the River Potomac, by John Trumbull et al., September 17, 1798; Affidavit of Angus McDonald et al., April 1, 1799 (quoted); and Agreement between the Directors of the Potomac Company and George Beall, September 28, 1799. Records of the Potomac Company, Correspondence and Reports, 1795-1801, all in National Parks Service, Record Group 78, NA.

53. Washington to Lear, November 30 (quoted), December 2, 28 (quoted), and 30, 1795, and February 15, 1796. Letters and Recollections of Washington, 97-101, Lear to Jefferson, March 15, 1796, in "Washington and the Potomac," 793-721.

54. Meetings of the Directors, September 23 and November 3, 1798, May 1-2 (quoted), and June 8, 1797. Records of the Potomac Company, Proceedings, 1795-1801. National Parks Service, Record Group 78, NA. Myers' draft discussed apparently damaged his business reputation. He felt compelled to place an advertisement in the *Albany Advertiser*, July 21, 1793, requesting "the public . . . to suspend any opinion that may arise from certain CALUMNIES or insinuations tending to injure my character."

58. Harbough to the Directors, June 8, 1791. Records of the Potomac Company. Correspondence and Reports, 1785-1801; and Meeting of the Directors, December 12, 1803. Records of the Potomac Company, Proceedings, 1785-1805. National Parks Service, Record Group 79. NA.

59. Meeting of the Directors, June 3-6, 1796 (Harbough discharged); General Meeting of the Stockholders, February 8, 1796 (votes of shares); Meeting of the Directors, October 3-4, 1795 (petition); General Meeting of the Stockholders, August 5, 1795 (bills collected). All in Records of the Potomac Company, Proceedings, 1785-1805. National Parks Service, Record Group 79. NA. Shepley, *Statutes at Large*, 2: 10-15. "Chesapeake and Other Canal." 7-9. A similar figure for total bills collected and capital expended was provided by John Mason, president of the company in the 1840s, see, "Report of the Joint Commissioners," 35-37. The total amount expended includes the bills collected.

60. General Meetings of the Company, February 8, and August 6, 1794, and Meeting of the Directors, June 3-6, 1795. All in Records of the Potomac Company, Proceedings, 1785-1805. National Parks Service, Record Group 79. NA.

61. General Meeting of the Company, August 6, 1795. Records of the Potomac Company, Proceedings, 1785-1795. National Parks Service, Record Group 79. NA. The President and Directors of the Potomac Company, "Resolved as we are, with the interests of the Company . . ." Resolutions, July 3, 1795, [Alexander], 1795.

62. Times, and District of Columbia Daily Advertiser, December 12, 1790. Order of the Maryland Legislature, December 4, 1795; General Meetings of the Company, December 12, 1779, and January 20, 1800 (new issue of shares); Meeting of the Directors, January 12, 1801 (Harbough); General Meeting of the Company, August 2, 1800 (2 percent dividend); all in Records of the Potomac Company, Proceedings, 1785-1805. National Parks Service, Record Group 79. NA. *Advertising Advertiser and Commercial Intelligencer*, February 4, 1800 (opening of canal). "Report of the Joint Commissioners," 17 (bills). The 1800 dividend was the only profit shareholders ever received from their investment.

63. General Meetings of the Stockholders, August 2, 1803, and August 1, 1805. Records of the Potomac Company, Proceedings, 1785-1805; and Mason to O'Donohue, January 20, 1804. Records of the Potomac Company, Correspondence and Reports, 1785-1801. in National Parks Service, Record Group 79. NA. Each of the annual reports to the Stockholders after 1805 included a listing of repairs and maintenance. see, General Meetings of the Potomac Company, August 2, 1807. Records of the Potomac Company.

Proceedings, 1805-1807, General Meetings of the Potomac Company, August 1, 1806, August 3, 1809, August 6, 1810, August 9, 1811, August 3, 1812, August 2, 1813, August 1, 1814, August 7, 1815, August 5, 1816, August 4, 1817, August 2, 1818, August 2, 1819, August 7, 1820, August 6, 1821, August 5, 1822. Records of the Potomac Company, Proceedings, 1804-1822, and General Meetings of the Potomac Company, August 5, 1823, August 4, 1824, August 1, 1825, August 7, 1826, August 6, 1827, and August 4, 1828. Records of the Potomac Company, Proceedings, 1823-1828, all in National Parks Service, Record Group 75, NA. See also, Turner-Bayne, *Potomac Company Canal and Locks*, 70-84.

68. General Meeting of the Company, August 1, 1805. Records of the Potomac Company, Proceedings, 1785-1807. Littlefield, "The Potomac Company," 574-577. In contrast, Becker, *The Potomac Canal*, 46-47 dates the start of the company's name after the War of 1812.

69. Potomac Company Petition, December 2, 1780. Miscellaneous Legislative Petitions, LCV, Henry, *Statutes at Large*, II: 154. Meetings of the Directors, September 5, 1798, June 12, 1795, and June 3, 1797. General Meeting of the Company, August 1, 1797, in Records of the Potomac Company, Proceedings, 1785-1807. National Parks Service, Record Group 75, NA. The Shenandoah Company was created in January 1798 with a capital of \$100,000 divided into 100 shares. The company would forfeit its rights to the river unless it was formed within nine months and the work completed within three years. See Shepherd, *Statutes at Large*, II: 99-100. She ran west on sale for the Shenandoah Company in April 1798; see Coleman, *River and Alexandria Gazette*, April 24, 1798.

70. Potomac Company Petition, December 2, 1800. Miscellaneous Legislative Petitions, LCV, Shepherd, *Statutes at Large*, II: 350-351, 450.

71. Meetings of the Directors, January 28 and August 3, 1803, General Meetings of August 6, 1804 and August 3, 1805, in Records of the Potomac Company, Proceedings, 1785-1807. National Parks Service, Record Group 75, NA (work on Shenandoah's River). "Chenoweth and Olin Canal," 84 Cols. collected in 1811. In 1804 the company solicited loans from the Bank of Alexandria for \$5,000, the Bank of Virginia for \$15,000, and the Bank of Potomac for \$25,000. A year later, the company reported that the Bank of Alexandria had lent \$1,000, the Bank of Columbia \$11,000, and \$4,000 had been obtained from the Washington branch of the Bank of United States. However, all of this \$22,000 had been expended on the Shenandoah by August 1805; see, Meeting of the Directors, December 12, 24, 1804. General Meeting of the Company, August 3, 1805, in Records of the Potomac Company, Proceedings, 1785-1807. National Parks Service, Record Group 75, NA. The total debt in 1806 is noted in the "Report of Invest

Continued." 50. For the latter issue see, General Meetings of the Company, May 4, and August 1805, August 5, 1810, August 5, 1811, August 3, 1812, and Meeting of the Directors, December 5, 1815, in *Records of the Potomac Company, Proceedings 1804-1822*. National Parks Service, Record Group 78, NA; and Lintfield, "The Potomac Company," 579-582.

55. Between 1801 and 1822 158,021 barrels of flour were transported down the Potomac River. In the same period 325,387 barrels of flour were exported from the port of Alexandria. The total value of goods shipped down the Potomac between 1801 and 1822 amounted to \$2,482,809, the total value of exports from the District of Columbia in the same time period equaled \$3,240,004. Quantities and value of goods transported on the Potomac. "Chesapeake and Ohio Canal." 54. exports from Alexandria, see Chapter 2, value of goods exported from the District of Columbia. "Value of Exports from October 1, 1790 to September 30, 1815." *American State Papers, Documents, Legislation, and Executive of the Congress of the United States, Class 2: Commerce and Navigation, 1789-1822*. 2 Volumes (Washington: Gales and Seaton, 1832), 1: 568.

56. From the instant people realized that the project would raise land values in the region, see, Madison to Jefferson, January 9, 1790, *Writings of Madison*, 3: 139. For examples of advertisements noting the effect of the Potomac Company's efforts on the value of lands close to the river see *Virginia Journal and Alexandria Advertiser*, June 29 and September 22, 1790; *Yarmouth Gazette and Alexandria Advertiser*, September 5, 1790; June 2, August 3, and September 18, 1790; November 2, 1792; *Columbian, Monitor and Alexandria Gazette*, May 24, 1794; March 15, 1795; May 20, August 3 & November 1, 1795; January 24, 1797; August 4, 1798; January 23 and October 2, 1800; *Alexandria Advertiser and Commercial Intelligencer*, November 4, 1801, and August 26, 1802. This list is by no means comprehensive.

57. On the creation of the Chesapeake and Ohio Company see, *Sandwich Grant, National Power*, 40-68; Douglas R. Egerton, *Charles Emmet Meyer and the Trial of National Conservatism* (Jackson: University Press of Mississippi, 1998), 187-247; 305-307, Shaw, *Canada for a Nation*, 84-107.

58. Colfax to Washington, April 5, 1795, *Washington Papers*, LC.

#### CHAPTER 4 ROADS AND THE MARKET

Long before northern Virginians considered the Potomac a viable route for conveying the produce of the West to Baltimore markets, farmers had used overland roads. And while it appeared to many Virginians that independence provided an unparalleled opportunity to clear the state's rivers for navigation, others believed that efforts should be made to improve the state's highways. James Madison, for example, proposed an overhaul of Virginia's roads to help revive the state's war-ravaged economy. He argued that a new arrangement for "opening and keeping in repair" the "harvest roads" from the backcountry to "the several market Towns, and from one market Town to another" would "greatly encourage agriculture by cheapening the transportation" of goods. Many northern Virginians shared with Madison a desire to create an integrated road system, but the incorporation of the Potomac Company in 1786 focused the energies and capital of the region's leaders on river transportation. Still, the search for more efficient methods to finance the construction and maintenance of the region's roads was an ongoing concern throughout the 1780s and 1790s. By the early nineteenth century the Potomac Company's problems in clearing the river had many northern Virginians to concentrate anew on the

possibility of improving overland routes. The biggest problem throughout the period was keeping possible the primary arteries which linked Alexandria to its agricultural hinterland – Loudoun, Berkeley and Frederick counties. The inability to maintain these roads provided a series of experiments that ultimately culminated in the establishment of the Little River Turnpike Company in 1840.<sup>1</sup>

In colonial Virginia, as in the northern colonies, the county courts controlled the construction and repair of all roads. In this the colonies followed the method of road maintenance established in England in the sixteenth century. Legislation passed in 1555 required English parishesmen to spend five days each year (later increased to six) working on local roads under the supervision of an appointed surveyor appointed by the churchwardens and responsible for keeping the roads free from obstructions. In Virginia laws passed in 1602, 1651, 1661 and 1706 established a similar system, and in 1766 the state passed a general road act which affirmed the existing colonial legislation. This latter law placed responsibility for the construction of new and maintenance of existing roads in the hands of the county courts. Petitioners wanting new roads to be laid out petitioned their local court which then appointed a panel of three ‘viewers’ who would decide whether the road was necessary. A favorable determination by this panel resulted in summonses being presented to the owners of the land through which the road should pass. If they objected to the proposal they

could appeal the decision of the viewers to a panel of twelve "able and discreet freeholders" of the county, unrelated to any of the parties involved. The twelve men jury was the final arbiter in the matter. In addition, each court divided the county into precincts and appointed a highway trustee over each. The trustee was responsible for keeping the roads within his precinct in repair, and had the authority to call out tithables serving him three two shaves to labor on the roads as necessary. If a tithable refused he was subject to a fine of 10d. for each day he declined to serve. The costs of the system—primarily for road maintenance—were paid out of the general county levy and fines assessed on those who violated the road regulations.<sup>10</sup>

The ineffectiveness of this system, particularly in maintaining heavily traveled through roads, was widely recognized. Though similar problems existed throughout America, the poor quality of the roads of northern Virginia often led them to be singled out for special comment by writers. Before the Revolution Nicholas Greenwell, while traveling west from Alexandria to Winchester noted that "the roads are very bad, not to pass with the waggon [red]." Some ten years later John Schloepf described the roads of Loudoun County as "wet and various, tedious and ruinous." Travelers in the early nineteenth century told a similar tale. John Caldwell, a New York City merchant who journeyed south for his health noted that the roads of northern Virginia were "puzzled in water and

populated an nation." John Bernard, an English visitor who toured throughout the country around the turn of the century, was equally appalled by Virginia's roads. For a lecture tour through the state Bernard noted "an old-fashioned condition." He even reported his change of transportation, leaving for "a dozen miles of Virginia roads threatened to annihilate" the carriage. The visitor "thoroughfare[s]" he concluded, should more appropriately be called "thorough failings."<sup>18</sup>

The opposition suffered by travelers of the region's roads was of little consequence compared to the problems the poor conditions created for local merchants and farmers. As Adam Smith wrote, "good roads" (along with "canals and navigable rivers") were "the greatest of all improvements" allowing the "remote parts of the country" to transport their goods to market continuously and town merchants to "break down the monopoly of the country." The trade of any market town, then, could be seriously hurt by the absence of good roads. Alexandria's merchants knew this first hand. Henry Poppe, a Scottish visitor living in Alexandria, complained in 1774 that "the Roads are so bad that we have had no Waggons for some time" and no produce arriving in town. Twenty five years later things had changed little as the complaints of Alexandria merchant Joseph Robble reveal. The "inconvenience of the Roads," he reported, frequently halted the flow of flour and other produce to Alexandria and raised their price. Similarly, the region's farmers complained of the difficulties of impassable roads. One group of

Frederick County residents complained that poor highways made "the Office [of weepers] for Damage . . . exorbitantly expensive," damaged weepers led to "the Destruction of Houses, and tended to 'protract a Journey which . . . might be performed in a much shorter period of time.'" After receiving a similar string of complaints, a group of Loudoun County farmers concluded that "the subjects are of more consequence to the Community . . . than that of denying access to the keep the public Roads (especially such as lead to navigation) in good repair."<sup>17</sup>

They were not alone. Many residents of the region recognized that roads laid out at the county level served primarily local needs. As a result, highways tended to follow circuitous routes with little concern for the interests of through travelers. Some believed that the problem called for drastic solutions. George Washington, for example, argued in 1784 that the "power of the County courts to alter" the roads be "withdrawn." He suggested that the state legislature, using general tax monies, contract out the work to road builders. Only in this fashion, he contended, could the "great roads" be kept "in good order," "shortened, straightened, and established by Law." The success of the plan, moreover, would be ensured by the reduction in overland traffic that would result from the completion of the Potomac River navigation. The savings of an integrated transportation system, Washington concluded, "will be felt most interestingly by the House and Planter."<sup>18</sup>

As in England the problems associated with local control arose from two sources. Inadequate funds, and an increasing unwillingness of local officials to work on and pay for roads which primarily served inter-county traffic.<sup>1</sup> The roads that suffered most frequently from overuse and inadequate repair were the heavily traveled routes which linked market towns and their economic hinterland. In northern Virginia two thoroughfares connected Alexandria in the lower Shenandoah Valley and both faced the similar difficulties.

The first of these highways was the Ridge Road. It extended northwest along the Potomac River from Alexandria to Leesburg in Loudoun County. From Leesburg the road continued in a westerward direction to the Catoctin Mountains in western Loudoun County where it divided. The north branch continued in the same direction and met the Blue Ridge at Vandy's Gap, while the south fork headed southwest towards Smucker's Gap. After crossing the Blue Ridge the north branch joined the Great Wagon Road which ran north from Philadelphia and linked Shepherdstown, Martinsburg and Winchester in the Shenandoah Valley. The south branch ran directly to Winchester. To the south, the Culpeper Road ran from Culpeper on the Rappahannock River northwest to Payne's Church in Fairfax County. At this point it joined Broadbent's Road which began in Alexandria. From Payne's Church the road extended west to Skipton Gap (1792 the town of Centerville), and from Centerville it headed northwest

following the western boundary of Loudoun County until it reached Abbe on the Little River. At this point the road forked, with the northern branch crossing the Blue Ridge at Bachelor's Gap and the southern branch following the Loudoun Fauquier County boundary to Ashby's Gap on the Blue Ridge. Both forks then crossed the Shenandoah River and met the Great Wagon Road at Winchester (See Figure 4-1f).

In northern Virginia the traffic on these roads multiplied as farmers of the lower Shenandoah Valley increasingly carried their wheat and flour west to the ports on the Potomac. Yet none from out of county were not required to labor on or pay for the routes they traversed. While roads remained under the jurisdiction of the county courts the responsibility for maintenance and repair fell to those who traveled within the vicinity of the thoroughfares. On local byways problems rarely arose for such roads generally required local tithables to work only one or two days per year. However, the heavier highways that linked markets and hinterland often needed as many as six days of labor per year per tithable. In addition, as labor demands rose the overseers of such roads were compelled to recruit labor from a larger geographic region. In Loudoun County, for example, overseers were ordered to draft tithables who resided up to four miles from the Ridge Road. Those forced to labor on the roads complained vociferously that such regulations were incompatible. An one group of over 500 petitioners



FIGURE 4-1 THE ROADS OF NORTHERN VIRGINIA.

from Loudoun County pointed out, those residing close to the busy roads faced "very great hardship" from which they derived "no advantages."<sup>46</sup>

The inability of the county system to maintain these two thoroughfares convinced many of the need for a new system of road repair. In fact, the search had begun even before the Revolution. The rise in traffic in the early 1770s and the ensuing deterioration of the main roads prompted the merchants of Alexandria to petition the House of Burgesses for some solution to their overland transportation problems. The legislature responded by requiring the county courts of Fairfax, Loudoun, Berkeley, and Frederick to levy an additional annual tax of £175 for the use of the road trustees of the various counties. Apparently, the solution was largely unworkable, by the 1780s the farmers and merchants of the region were searching for other alternatives. The decision to spread the costs among all users of inter-county roads, however, set a precedent for the future.<sup>47</sup>

Still, it would be a number of years before Virginia settled on a single method of improving the state's roads. Between 1780 and 1800 a variety of new modes of highway management were employed, though they rarely met with success. This was an era of experimentation of the state's internal improvements movement has noted "an era of experiments."<sup>48</sup> The economic expansion of northern Virginia after the Revolution guaranteed that it would play a leading role in the development of new modes of road administration.

In 1560 the Virginia legislature responded to the report's needs when it authorized the construction of turnpike gates and the collection of tolls on the roads leading from Alexandria and Colchester to Yeat's and Barker's Gaps. Such action was necessary, the preamble of the act stated, because the "great number of waggons [and] which travel the 'publick' roads leading from the north-western parts of this state' rendered the roads 'unpassable,' and the 'ordinary method' of maintaining the roads had been found 'insufficient' and 'exceedingly burthensome to those who are employed therein.'" The act authorized the appointment of new commissioners responsible for establishing turnpikes within five miles of Alexandria and stipulated that no vehicles could pass on the two roads without first paying tolls to collectors appointed by the commissioners. All fees collected were to be expended in the repair of the roads leading to Barker's and Yeat's Gaps and on the highway between Georgetown and Alexandria. In addition to the clause permitting the creation of toll roads the act also authorized the county courts of Fairfax, Loudoun, Berkeley and Stafford to levy an additional property tax of £100 each for three years for the repair of roads. Finally, the legislature specifically mandated that the provisions of the 1545 general road act that required the compulsory labor of tidables on county roads remained in effect, though it added that no person should work more than six days in one year. Thus, the new road act was a hybrid, combining venerable methods of labor recruitment with novel funding

technique. Despite these limitations, northern Virginia's turnpikes were the first created in North America.<sup>12</sup>

The legislature made amendments designed to improve the operation of the turnpikes not the following year. In order to chart a more direct course for the Ridge Road, the assembly not only authorized the commissioners to "view and mark out the most convenient way for turning and straightening the roads leading from Vestall's and Snodder's Gaps to Alexandria." Action was also taken to improve the Colchester Road. Apparently, the turnpike commissioners had made no effort to improve or collect tolls on this road. They may have delayed action because supervision of the road was divided between Fauquier and Loudoun counties, for thirteen miles before it reached Ashby's Gap the Colchester Road ran alternately through the two counties. In order to simplify the situation, the legislature authorized both counts to draft ordinances for road labor "within their county" and "without" along the stretch of road that wandered over the county line.<sup>13</sup>

The idea of establishing a new local body to administer non-profit turnpikes was not original to Virginia. Like the traditional county system of road repair the turnpikes established in 1785 followed closely measures adopted in England. In 1663 the English Parliament passed Britain's first turnpike act which like the Virginia legislation was "a modified version of the parish repair system" implemented only on the heaviest traveled roads where the local system of road maintenance had failed. In addition, the

road commissioners of northern Virginia, like the 'turnpike trusts' of England established after 1766, constituted a distinct local authority, appointed by but independent of the county courts. Finally, the turnpike authorities in both England and northern Virginia faced widespread criticism in their early years. In England many men viewed the new turnpikes as "an obnoxious regulation" that benefited the wealthy owners of carriages at the expense of the poor and raised commodity prices. When petitions to Parliament failed to slow the creation of new roads, opponents resorted to tearing down turnpike gates. These "turnpike riots" occurred throughout England in the first half of the eighteenth century.<sup>22</sup>

In northern Virginia the opposition to the new turnpikes was of a different nature. Judged by electoral petitions which Fairfax and Loudoun residents sent to the House of Delegates in November 1761, inhabitants of the region did not appear impressed with the new law. They did, however, object to the allocation of costs as the 1760 act said and to the road commissioners' management of the turnpikes. The new law, the petitioners complained placed additional burdens on them without producing substantial benefits. The money collected from all residents of the counties was expended on "only two roads," the Ridge and Georgetown roads to Alexandria, used by only "a fourth part of the inhabitants." In addition, the commissioners had fixed the turnpike prices so close to Alexandria that "no Wheel Carriage from any part of the County can go into Town, without being subjected to

Toll." People who traveled only "ten yards on the Roads," the petition noted, were "compelled" to pay tolls. Equally objectionable, the township commissioners had pressed into their employ "Hinds at several Miles Distance from the real Roads, and who never before worked upon them." And despite all these additional burdens "the \_\_\_\_\_ Roads never were in worse order than they have been they' this present Year." The petitioners concluded that "reporting Roads by means of Turnpikes is impracticable . . . whimsical and absurd." The turnpikes not placed "arbitrary and unconstitutional Powers" in a "Set of Men subject to no legal Control [sic]" the turnpike commissioners, and as a result legislation designed to benefit the entire community had been turned "to the purposes of local and party Interest as the Executors."<sup>41</sup>

The reference to "local" interests provides a hint as to the provenance of the petition. It was written at the instigation of prominent Fairfax County resident, George Mason. Mason had been hostile to the merchants of Alexandria since the early 1740s when he "complained loudly of" a 30,000 pound tobacco tax assessed by the town-controlled county court. Further attacks on the court followed in 1762 and 1783. Mason's criticisms of the turnpike commissioners followed the same pattern of opposition which our historians has concluded was "more personal than political."<sup>42</sup> Nonetheless, Mason managed to attract over 400 signatures to the Fairfax petition, while

the London petition was signed by over 200 persons. Clearly, he was tapping into a widespread discontent over the operation of the 1793 law.

The turnpike commissioners from Fairfax, George Oliver and Charles Little, vigorously defended their actions as a moral petition, but to little avail. Mason was appointed chairman of the committee that prepared amendments to the 1793 and 1794 legislation, and under his guidance it passed the House of Delegates in December 1797. What is most notable about the new legislation, however, was the fact that in spite of Mason's apparent repudiation of public turnpikes it actually expanded the turnpike administrations established in 1793. The new legislation required that the Colchester Road "shall hereafterward be kept in repair, in the same manner [and] . . . under the authority of the same commissioners as the other turnpike roads." Other provisions of Mason's legislation exempted individuals from paying tolls who lived within a quarter mile of Alexandria, eliminated the 200 levy in Fairfax, Loudoun, Berkeley and Frederick counties, appointed an additional turnpike commissioner in each county, required commissioners to make a more thorough reporting of expenditures to the county courts, and established new procedures for altering and strengthening turnpike roads. The new legislation did not end turnpikes in northern Virginia; it merely removed the more "oppressive" provisions of the old acts.<sup>52</sup>

Still, public turnpikes were not a great success. Traffic to Alexandria from the West remained heavy, and the commissioners were unable to keep the roads in a passable state in all seasons of the year. Between August 1792 and July 1793, for example, almost 1,000 vehicles and over 600 wagons paid tolls at Turnpike Gate Number Two located outside Alexandria. Yet the number of wagons passing the tollgate each month fluctuated dramatically. In January eighty wagons paid tolls. The following month only twenty-two wagons used the turnpike. By March, in contrast, the number had risen to seventy-five, and between April and June over 300 wagons entered Alexandria. While some of this variation can be attributed to the spring wheat harvest, the sharp drop in traffic in February (only twenty-eight vehicles of all types paid tolls) suggests that the turnpikes were in poor condition. Certainly, many of Loudoun County's residents believed so. Writing in October 1793 they noted that "the Situation of the roads leading from the Back Country to Alexandria was such during the last Winter and Spring that no Team [of horses] could travel them, except a very strong one."<sup>17</sup>

Similar complaints surfaced in all the counties of the upper northern neck. Twice in the early 1790s Berkeley County residents petitioned the Virginia assembly for some solution to the problem of road repair. In 1792 over 100 residents asked for the repeal of the 1788 turnpike law. A year later 150 petitioners requested that the legislature permit road

communities elected by the residents of the counties of Fairfax, Loudoun, Berkeley, Frederick and Shenandoah to "lay a moderate Tax upon the inhabitants of the said counties." The money raised would be used "to hire Hands for the purpose of Repairing and keeping in Repair the..... Roads." Evidently some residents of Berkeley believed the use of compulsory taxable labor impeded the upkeep of the region's roads. By the early 1790s many of Frederick County's merchants and farmers agreed. They had "paid with cheerfulness" the tolls imposed on the turnpike road to Alexandria, yet under its present management the road was "much worse than it was before the Law passed." Fairfax County residents also complained bitterly about the present law, noting that "the Labour necessary to keep" the roads in repair "is greater than can be performed by the Taxables.... obliged to perform that Service."<sup>29</sup>

Still, it was in Loudoun County, through which the great roads to the lower valley passed, that residents suffered most. Between 1780 and 1790 the county over four petitions signed by over 600 individuals to the Virginia legislature. Like the residents of the valley, many Loudounites believed that the use of compulsory taxable labor needed to be scrapped in favor of a system that matched turnpike commensurators to low paid laborers. The bond workers, one proposal suggested, would be paid with funds raised through "a Tax on Lands and other Property." Such an arrangement would be a vast improvement on the present and laws under which "the whole

Labour is confined to those whom chance has placed near' the turnpikes while 'a neighbour very little more remote is equally and many times more benefited' by good roads but 'chance no part of the burden.' This "inequality," the petition stated, is "so sensibly felt by those whose Lot it is to work on the Road, that it is with reluctance they go out on their business." In consequence, "very little Labour is performed, the Roads remain without sufficient repair, and are found impassable during the Winter and Spring."<sup>12</sup>

The Virginia legislature failed to respond to these petitions,<sup>13</sup> and the publicly-administered turnpike roads of the region continued to deteriorate. By 1793, however, some residents of the region proposed a new instrument for keeping possible the roads to the West: a private turnpike company. The concept came from Pennsylvania. In 1789 some of the leading men of that state, faced with poor roads and inadequate public resources, formed "The Society for promoting the improvement of Roads and inland Navigation" and elected Robert Morris, the Philadelphia merchant, president. A petition presented to the Pennsylvania legislature by the Society in 1791 recommended the establishment of private road and navigation companies (thaty were in all ways proposed) to improve Pennsylvania's water and road transportation. Such companies, the Society argued, should receive state aid and be empowered to collect tolls on the new arteries. The most successful company spawned by the Society's efforts

was the Philadelphia and Lancaster Turnpike Road Company, which was incorporated by the Pennsylvania assembly on April 8, 1792 to build an artificial road between the two towns. Strong financial backing and public support enabled the company to begin construction by August 1792 and complete the turnpike to Lancaster (a distance of sixty-two miles) within two years.<sup>19</sup>

The success of the Philadelphia Lancaster Turnpike and the quality of the road constructed attracted many northern Virginians to the idea. Petitions from Loudoun and Frederick counties in November 1795 requested that the legislature incorporate a private company to build a road between Alexandria and the head of the Little River in Loudoun, and that the new enterprise be organized along the "plan which has lately been adopted in the State of Pennsylvania." Once again, the motive for the new proposal was the "very bad State of Repair" of the turnpike roads and "the increasing population, and . . . annual Extension of the Agricultural productions of this part of the State." The company, the petitioners noted, would consist of "such persons as shall voluntarily subscribe" to the goal of constructing "and preserving in good condition, an artificial road of stone and gravel."<sup>20</sup>

This proposal included two important innovations. First, the petitioners' plan to establish a corporation that would build a public road transferred to private hands a task that had always been the responsibility

of local government. Supporters of the proposal believed that a private company would be better able to raise capital and carry out construction than county courts which lacked the financial and organizational means to continue the task when road traffic increased. Via "have not any hopes," the petitioners argued, "of maintaining a permanent and passable [and] road by any other" means.<sup>22</sup> Second, the subscribers proposed a new method of road construction. The dirt barometer of northern Virginia was to be replaced by an artificial road, built according to the latest construction techniques developed in Great Britain by men such as John Macadam and Thomas Telford.

Incorporated companies, of course, had a long history in England, and the Virginia legislature, following Washington's advice, had created the Potomac River Company with a similar structure in 1793. Thus by 1795, though private incorporated businesses were rare in Virginia they were not unprecedented.<sup>23</sup> Still, in the early republic the corporate structure met with mistrust in many Americans. In particular, it was believed that corporate charters would result in the economic ascendancy of groups granted these special favors and the simultaneous ruin of individuals not so privileged. Such favoritism contradicted the concept of republican equality and, it was supposed, threatened to undermine the virtuous livelihood of independent entrepreneurs and farmers. Moreover, many worried that as time the favored groups would evolve into a new aristocracy dependent for their well

being in the government and willing to subvert it from the public good. As John Taylor of Caroline noted, government partiality to "a capitalist interest" would help "rear up an aristocratical order, at the expense of the weakness of the north."<sup>10</sup> He argued that the only way to maintain government neutrality was to deny all future requests for incorporation that threatened to "hinder agriculture and manufactures" and to repeal all existing charters that had a similar effect.<sup>11</sup>

Yet despite the existence of political opposition to incorporation and private turnpike companies in other parts of the country,<sup>12</sup> there is little evidence that a similar antagonism flourished in northern Virginia. This is not to say, however, that the new road proposal went unopposed. A rival group of Loudoun County residents fired off a counterpetition that called for the turnpike company proposed to "be quashed." These citizens did not maintain ideological antagonism to corporate charters or private companies, but concentrated instead on local economic concerns. The petitioners were apprehensive that the promoters of the turnpike wished to build it along a new, more northerly route. The old route (the Colchester Road) they noted, ran "upon much better ground," and its location in the southern part of Fairfax and Loudoun counties better served the needs of the region. Residents of the northern portions of the two counties required better roads because they looked the horses to the Potomac employed by farmers living close to the river. And since the Potomac would "in a short time be

temple" a road artery across the northern portions of the region was unnecessary.<sup>17</sup>

Most disturbing to the temple opponents, however, the new road would bypass the town of Centerville. "The object of laying off the Town," the petitioners declared, "will be defeated" by the new route. Here was the crux of the matter. Though they claimed that the "Public" would be materially injured" by the proposed road, the signers' primary concern was to preserve their investment in the town, incorporated only three years earlier. Figuring prominently among the fifty men names attached to the petition were the town's primary land holders and trustees – men such as John Stuart Alexander, David Stuart, Francis Adams, Samuel Love, and William Love. The debate over the temple, then, did not involve abstract debates over the benefits of private corporations – on that subject there appears to have been little disagreement. Rather, local business representatives, competing economic interests, their expressions of concern for the "public" interest constituted little more than "political theater." If the temple road bypassed Centerville the town would have become an isolated backwater and buyers of town lots would have seen the value of their investment diminish.<sup>18</sup>

For the time being the promotion of the new temple had the upper hand. The Virginia legislature rejected the petition from the Centerville residents and passed an act in December 1795 incorporating the Temple

and Loudoun Turnpike Road Company. And helping concerns about the dangers of corporate entities, during the same session the assembly created two other private internal improvement companies in northern Virginia. The act creating the Fairfax and Loudoun Turnpike also authorized the establishment of the Warrenton Company, which was to build an artificial toll road between the Great Falls of the Potomac and Alexandria. A petition from members of the Potomac Company who wanted to ensure the easy transport to Alexandria of produce floated down the Potomac to the Great Falls had prompted the creation of the second turnpike company. In addition, the assembly responded to a petition from Prince William County residents by incorporating the Quantico Company. The trade of the town of Dumfries, located at the mouth of Quantico Creek, had declined as the business of Alexandria had increased. The merchants of the town hoped that opening irrigation on the creek, which flowed east from Fairfax County towards the Potomac, would revitalize the town's economy.<sup>47</sup>

The act granted the Fairfax and Loudoun Company a capital stock of \$250,000 divided into 1,250 shares worth \$200 each, 600 of which were to be sold in Alexandria and 650 in Winchester. Subscribers were required to put \$50 down on each share they purchased and there were limits set on the number of shares that could be acquired by a single individual. The legislation further stipulated that the company begin operations when at least 100 subscribers had purchased 500 shares. After the company had

and the share a general meeting of the shareholders would elect a president, six directors and a treasurer, meetings of the shareholders to elect the company directors were to take place on an annual basis thereafter. The act also empowered the directors to vote the shares of stock holders who failed to meet at a timely fashion the unpaid portion of their shares as demanded by the company.

In addition, the act authorized the company to survey and purchase land over which the road would pass, and to procure all materials necessary for the construction of the turnpike from adjacent lands (both at a price determined by an impartial body). Tolls could be collected after ten miles of the road had been completed and approved by "three skilled and judicious persons." The act established the rate of tolls, and in order to protect the road surface set penalties upon unusually heavy vehicles or those that had narrow wheels. To protect the users of the road, the act set penalties on the company and its employees if the road fell out of repair, and required that it have clearly marked supports, mile markers and toll rate signs. The act also contained measures designed to protect the investor's profit margins, allowing the company to raise tolls if dividends were under 8 percent per year and requiring that they be lowered if they exceeded 18 percent. Dividends were to be paid to the shareholders twice yearly, and the directors required to present their accounts on a regular basis to both the shareholders and the Virginia assembly. The act also specified that if

construction had not begun within two years, then the state would "incure all ... the rights, liberties, privileges and franchises granted" to the company.<sup>46</sup>

The detailed nature of the act reveals a pronounced need to regulate carefully the operation and delineate the authority of private corporations assuming public functions. Innovation in the administration of something as important as roads demanded careful oversight. Just as important, the attention of the legislature also extended to the innovative construction techniques proposed by the turnpike trustees. The new turnpikes, unlike the old publicly administered roads, were to be "totalled." The 1790 act specified that the company build the road fifty feet wide, twenty one feet of which was to "be filled with wood, stone, gravel, or any other hard substance well compacted together." This foundation, in turn, was to "be filled with gravel or stone powdered, in such manner as to secure a firm and even surface." In addition, the road was to be crowned at the center and have a grade of no more than "four degrees with an horizontal line."<sup>47</sup>

The construction methods outlined in the act loosely followed the techniques developed by the British turnpike trusts in the eighteenth century. Construction of new roads consisted of essentially three steps. The first stage involved laying out the route of the road. In general, this entailed determining the most direct route between two points. However,

deviation from this line was advisable in order to avoid sharp grades, swampy ground, or expensive battles over private land. Additionally, a road might diverge from the shortest line of doing so to avoid road traffic, brought the road closer to building materials, or exposed its surface to the sun and wind (which aided in keeping the road dry). The location of other roads in the same region also influenced the choice of route, though the absence of other private turnpikes in northern Virginia in the 1790s required this factor. More important was the influence of local political and economic interests. The routing of a major artery could negatively affect land values and strongly alter the economic life of the region. Towns bypassed by a major road faced economic decline, while those through which a road passed might potentially reap great benefits. It was this concern of owners which had motivated the opposition of Confederate residents to the new turnpikes.<sup>10</sup>

After the route had been selected, construction of even the simplest of roads required that all superfluous stones, trees, and stumps be cleared. At this stage, the road builder also needed to smooth and level the surface of the road. This involved flattening ruts and filling in hollows with "the natural soil." Sharp inclines or depressions decreased the utility and raised the costs of using a road, for they obliged travelers either to increase the number of animals used to pull a vehicle (thereby aggravating road damage) or decrease the weight such wagons carried. Finally, even in the

construction of the surplus of roads some attention was paid to drainage. Standing water, road builders recognized, wreaked serious damage. As an 1808 correspondent to an *Albany* newspaper noted, "The first and most essential part to be attended to" in the construction of "ARTIFICIAL, RIGID" was "laying & keeping" the foundation and surface dry. To prevent water damage builders dug drainage ditches parallel to the road, and used well constructed from ditches to elevate the road above the surrounding land. In addition, many builders constructed road surfaces which rose slightly towards the center (or the "crown") in order to promote water drainage into the ditches. The most advanced builders also constructed culverts under the road whenever the surrounding land was higher than the road surface. Culverts helped prevent flooding on low-lying surfaces and allowed water to flow into the natural watercourses.<sup>18</sup>

The use of these techniques was widely practiced on the turnpike roads of the northern states. They also appear to have been employed on the publicly-built roads of northern Virginia, and during the turnpike construction boom after the War of 1812.<sup>19</sup> The roads contemplated by the private companies created in 1795, however, added a third step to construction. The natural soil of the road, according to the act, was to be surfaced with a durable material. Yet while supporters of the new roads recognized the need for a permanent artificial surface, they created little agreement over the most effective means of building such a road. The

conference was evident in the instructions included in the sample legislation. The act specified that the roads should present a firm and even surface, but provided little technical guidance either with regard to the materials that should be used—wood, stone, gravel or "any other hard substance" were all recommended—or to the most practical road building methods.<sup>10</sup>

That Virginians were uncertain about the best road building techniques should come as no surprise, given that "unofficial" experts in Great Britain could not agree. In general, two schools of thought divided English road engineers. One group followed the ideas of Thomas Telford who recommended that good roads required a foundation of large stones immersed tightly into the soil. Upon this bottom stratum was added a layer of smaller stones to a depth of seven inches, while the top layers were to consist of small stones topped by one inch or two of gravel. This system of progressively smaller stones positioned in layers produced extremely durable roads, but was also extremely costly and labor intensive. John McAdam, in contrast, argued that a foundation layer of large stones was unnecessary. The key to permanent roads, he argued, was keeping the "native soil" upon which the road lay "preserved in a dry state." To do so required two steps. First, the road bed had to be "raised above the ordinary of the adjacent land" and second, "a covering impervious to rain" had to "be placed over the soil." McAdam maintained that a firm surface would be

obtained by placing a single layer "of clean dry stones or flint" broken into irregular pieces no larger than a "common hen's egg" over the mud bed. The weight of traffic, he argued, would bend the stones into a uniform road surface.<sup>22</sup>

Even with divided expert opinion, Americans writing about roads came to no clear verdict. For example, in 1808 Albert Gallatin advised the use of a "stratum" of large "pounded stones," but also observed that a road's artificial surface should consist of stones of comparable quality and size not exceeding three inches in diameter. Writing thirty years later Simon De Witt Blodgett similarly combined the two methods. He observed that "the nature of the soil led us to the necessity of having a non elastic foundation, even now to prevail," yet the technical appendix of his road treatise presented detailed descriptions of both MacAdam's and Telford's methods. In the 1780s the average American road builder proceeded to even greater ignorance, and as time past his technical decisions were often influenced by financial considerations. Confronted by conflicting advice, builders employed trial-and-error methods as they sought the cheapest means to create an artificial road surface. American road building tended to be haphazard, and most builders disregarded both Telford's foundation of large stones and MacAdam's use of small stone paving. The result was rougher roads consisting of larger rocks than recommended by MacAdam and without the firm foundation suggested by Telford. Such roads, however, were built

were cheaply per mile than was possible following the plan of earlier English engineers.<sup>17</sup>

Overcoming the technical problems of turnpike construction, the promoters of the new roads began, albeit with more pressing matters. The passage of the act prompted efforts to publicize and attract support to the new turnpike companies in early 1786. An article in the *Columbian Magazine*, for example, described in detail the poor roads around Baltimore, noted how the trade of the town suffered as a result, and pointed to the Lancaster Turnpike in Pennsylvania as a model to be emulated. Elias Fries, the paper's printer, prefaced the report by declaring that the "following remarks will not be found applicable to those [road-building] from Alexandria." A week later the commissioners of the Mountville Turnpike announced that subscription books would open on March 18. The commissioners of the Fairfax and Loudoun Turnpike placed a similar advertisement five days later. Written in both English and German—to attract the German farmers of the valley—the commissioners noted that subscription books would be opened on April 18 in both Alexandria and Winchester.<sup>18</sup>

The two private turnpike companies were the first in Virginia and among the first in the United States. When the Virginia legislature created the companies only Pennsylvania, Rhode Island and Connecticut had authorized similar private road-building corporations.<sup>19</sup> Yet the early promises came to nothing. Construction on the roads never began. Indeed,

with the exception of an advertisement placed in late 1788 by Joseph Thompson which announced that the subscription book for the Manassasville Road remained open, both road projects appear to have been completely abandoned. By June 1797 the road commissioners appointed by the county courts to administer the public turnpikes were back at work, and they were still on the job a year later.<sup>20</sup>

Why did this early attempt to create private turnpike companies fail? Neither the opposition of the Centerville residents nor an ideological aversion to corporate entities provides a satisfactory explanation. The Centerville residents, if their 1788 petition is any indication, failed to gain much support outside the town, and a surprising number of private companies were incorporated in northern Virginia in the twenty-five years after the Revolution with little ideological protest.<sup>21</sup> Thompson's 1788 advert, however, suggests a much more fundamental problem. "Only a few additional shares," he explained, were "wanting to authorize the commencement" of the Manassasville Road. The 1788 turnpike companies had failed to sell enough shares, and this failure was directly attributable to the expense of the companies' stock. The shares of the Fairfax and Loudoun, and Manassasville companies had cost \$200 and required a \$50 down payment—beyond the means of many of the region's residents. In contrast, seven years later when the Virginia legislature incorporated the Little River Turnpike Company to build a toll-free road from Alexandria

to the Little River its shares were valued at only \$100 and a \$10 deposit was required. The failure of this later project had learned a valuable lesson from the failure of 1798. To be successful a turnpike company had to attract local support, and this could occur only if the shares were affordable for the middling farmers of the region.<sup>40</sup>

But the problems associated with publicly-administered turnpikes did not disappear. The public turnpikes remained unprofitable in the winter months of the year and objection to the compulsory system of tolls continued. In 1797 disgruntled turnpike users advertised that a petition calling for the repeal of the present turnpike law and the implementation of "some mode more likely to keep the roads in repair" would be forwarded to the legislature in the coming session. A year later a similar advert was placed. Also in 1798 opponents of the public turnpikes adopted a new tactic. "Some of the people of Alexandria," noted the treasurer of the turnpike roads, had "breached the ditch" of the Georgetown Road where the toll gates were situated and "now pass without paying." Furthermore, the "same persons" threatened to "breach the ditch . . . on the Leesburg [Kilgus] road." Apparently, then, the public turnpikes had resorted to direct action and built a "shortpike," a bypass around the tollgates, to avoid paying tolls. Their actions, however, succeeded only in convincing the old toll collector, William Simpson, to resign. In August 1798 the turnpike commissioners announced the appointment of a new toll collector, John Boyce, and

promised that he would take legal action against any persons who refused to pay tolls at 'The gates on the low dike' <sup>145</sup>

The commissioners' immediate response seems to have stopped the immediate problem of disruption, but it did not improve either the administration or the condition of the turnpike roads. For example the turnpike commissioners were faced with ongoing financial difficulties. A meeting of the commissioners held July 1, 1808 brought the problems to light. Thomas Elbery and Hugh Powell, the commissioners from Farnham and London, acknowledged that 'much blame' had fallen on them 'for neglecting the roads under their management.' They argued, however, that the costs of maintaining the roads far exceeded the tolls collected. On average, £13 per month was collected on the turnpikes, nearly half of which was used to pay the expenses of maintaining the turnpike gates; at the same time the public turnpikes owed over £300 in outstanding debts. "The inadequacy of the present system," they concluded, "must be obvious to every one" <sup>146</sup>

It was in December petitions signed by over 100 individuals from London and Farnham once more demanded that a more efficacious method be found to maintain the roads between the River Stige and Alexandria. The petition suggested that a tax in addition to the tolls already collected be levied on the revenues collected and with that money "hands be hired constantly to work on the roads." The legislature ignored the request for a

new county levy, and instead tossed the votes back at the voters of northern Virginia. An act passed in January 1881 required the freeholders of Loudoun, Fairfax, Berkeley, Frederick and Alexandria counties to elect a road commissioner for each of their counties. Commissioners elected by the voters, it was hoped, would possess greater authority and influence than road managers appointed by the county courts. The newly-elected officials were to meet in May at Leesburg in order to find some plan to repair the roads from the Blue Ridge to Alexandria and to discharge the debts of the bankrupt commissioners. The recommendations of the elected officials were then to be transmitted to the county courts who would appoint two commissioners per county to administer the new regulations.<sup>10</sup>

In April the voters of Fairfax County elected Nicholas Fardough road commissioner. After consulting with the voters of the county at a public meeting held in Alexandria on May 2, Fardough met with his counterparts from Loudoun and the lower valley in August. The results were disappointing. Though the commissioners lamented the "present deplorable state of the roads" and recognized that failure to act would "direct the course of . . . trade" northward, they suggested few new solutions. The only innovations they recommended were that road commissioners be regularly elected and that work on the roads be contracted out to the "lowest bidder." However, they resorted to traditional methods of funding and labor recruitment. Money was to be raised through an additional county levy and

the collection of tolls while labor was still to be supplied by county tithables although they would be required to work no more than three days per year. The commissioners had no solution for paying off the debt. They could only hope that "at a period not very distant the toll will afford a surplus sufficient" for indemnifying creditors. The commissioners' recommendations were wholly inadequate and the county courts took no action to implement them.<sup>48</sup>

In northwest Loudoun County the search for more effective means of road repair was no more successful. In 1737 the farmers of Loudoun and Fauquier counties requested that the legislature authorize the formation of "one or more Turnpikes" to raise \$10,000 "or such other sum as may be thought adequate" for the improvement of the road between the Little River and Ashby's Gap on the Blue Ridge (the western end of the Colchester Road). They justified their request upon the usual grounds: "The great number of Waggons [sic] travelling" the road and the "labour and expence" required to keep it in proper order "under the present laws." Their plan was not unprecedented. During the 1700s several states had resorted to tolls as a means to raise money for road building. In Virginia the construction of the road between Rockfish Gap on the Blue Ridge and the Potomac River had been financed through a tollway authorized in 1700. Later the same year and in 1704 the merchants of Alexandria organized a series of tollways to raise \$5,000 to pave the busiest streets of the town.<sup>49</sup>

Nevertheless, the legislature declined to approve a similar scheme to repair the road between Ashby's Gap and the Little River. Instead, in January 1798 the assembly expressed intention "being within three miles of the turnpike from working on it." This action failed to satisfy the users of the road and in 1801 and 1802 petitioners from the two counties renewed the request for a lottery. Not until early 1806, however, did the legislature finally authorize a lottery to raise \$18,000 to improve the route between the Little River and the Blue Ridge.<sup>48</sup>

In 1801 the publicly-administered road system of northern Virginia was in disarray and the need for a workable alternative obvious. The legislature acted to solve the problems in January 1802 when it authorized the creation of the Little River Turnpike Company to complete a thirty-foot wide gravel or stone road from the southeast corner of Alexandria to the Little River in Loudoun County, a distance of thirty-four miles. With the exception of the smaller deposit required by subscribers (\$50), the lower cost of shares (\$100), and a total capital amounting to only \$40,000, the Little River Company was organized along similar lines and with similar privileges as its predecessor, the Fairfax and Loudoun Company. After 200 shares had been subscribed the commissioners appointed by the act were empowered to call a meeting of subscribers to elect a president, treasurer and four directors. The directors could then sell the remaining 200 shares, all of which were transferable. Stockholders who failed to make payments

on their shares as demanded by the directors were to forfeit them to the company. The act also gave the corporation the privilege of eminent domain over both materials needed for construction and land, and enabled it to collect tolls at rates set by the legislature after ten miles of road had been completed, except when the road was out of repair. Finally, the company had to begin work by March 3, 1863 and finish within seven years.<sup>47</sup>

In April 1862 the commissioners appointed by the act opened subscription books in Alexandria, and Loudoun, Berkeley, Frederick and Shenandoah counties. The advertisements announcing the opening of the books extolled the advantages a successful project would bring to "the community," and initiated an extensive publicity campaign designed to attract prospective subscribers. In July and August the complete text of the company's charter was printed in both of Alexandria's newspapers. A few days later "A Fellow Citizen" argued that the turnpike was of interest to the entire region: "mercantile mechanics, and more particularly . . . the Farmer" he wrote, would all benefit. Alexandria's commercial interests would enjoy a rising flow of produce to the town which might otherwise be directed southeast to Baltimore or Fredericksburg, or to the recently opened Potomac to Georgetown and Washington. Farmers would benefit even more. The turnpike would allow farmers better, cheaper and more rapid access to their chosen market, enable them to carry heavier loads with fewer horses, and enhance the value their loads "from 20 to 100 per cent."<sup>48</sup>

"With so many advantages," the writer concluded, the entire region "must unite in opinion" and support the new road.<sup>12</sup>

The promotional campaign was successful. Reports in early August indicated that subscriptions for the first 200 shares were "nearly" completed and that the work would begin in a short time. By August 18 subscribers had purchased all available shares and the first meeting of the company scheduled for September 22.<sup>13</sup> Significantly, appeals to prospective investors stressed the public utility of the new territorial corporation. Rather than promoting the interests of a particular class of investors at the expense of the public good, the Little River Turnpike, supporters argued, would benefit the entire region. "A subscriber," for example, noted that he cared not whether he ever "received our penny of interest by way of dividend on the stock." The real value of the turnpike lay in "the increase of business, of trade and the general appreciation of property" which it would afford "benefits from which all citizens could gain."<sup>14</sup>

Traditionally, of course, authority over matters which promoted the public welfare had been the province of government. However, when the county courts of northern Virginia, under the pressure of rising traffic, were found unable to perform their customary duties with regard to the roads of the region the public sought other alternatives. The private corporation was created, then, to perform a public function local government had bungled. This was a common practice throughout the early republic. As Mary and

Georg Handlker have noted, the early corporations operated 'as an agency of government – endowed with public authority, exclusive privileges, and political power, and designed to serve a social function of the state'. In northern Virginia demand for such entities arose from within the local community which sought to provide the region with 'basic facilities' – in this case roads – upon which other economic activities depended. Only in this context do the public appeals on behalf of the turnpike make sense. Investors were not lured with promises of large profits from dividends; instead, turnpike supporters emphasized the 'many advantages' the new road would bring 'to the community'.<sup>100</sup>

The appeal to public interest had an additional, more potent function. Like much of the nation in the 1790s and the first decade of the nineteenth century northern Virginians were politically divided between the Federalist and Republican parties. The passage of Jay's Treaty in 1795 opened a sharp political cleavage in the population so that the election of 1796 inspired Republican opposition to the Federalist majority of northern Virginia in the 1790s led in 1797 to the establishment of a Republican paper in Alexandria. Thereafter, the two newspapers – both highly partisan, mirrored political debate. In the late 1790s the Adams and Sedgwick acts passed by John Adams and the Federalist Congress generated widespread antagonism to the Federalists and led to a bitterly-fought election in 1800. In the process, nevertheless, the success of the Little River Company

dependent on divorcing the project from politics and presenting it as a boon to the entire political community—Federalist and Republican. The unadvised support of both Alexandria newspapers for the bridge reveals the interest of the early leaders of the company in this endeavor.<sup>13</sup>

The company met with 148 of the investors present, on September 22, at Leesburg and proceeded to elect the president, directors and treasurer. Prominent among the company's leadership were Alexandrians, Fairfax and Loudoun County residents. James Keith, a leading Alexandria lawyer and merchant and president of the Potomac Company, was elected president. The directors included Levin Powell, a prominent Loudoun County merchant and Federalist politician; Richard M. Smith, a Fairfax County attorney and planter closely associated with the mercantile community of Alexandria; George Gilpin, an Alexandria merchant and director of the Potomac Company; and John T. Roberts, a Fairfax County merchant and miller. The Treasurer was William Harshbarger, a prominent Alexandria merchant, mill owner, banker, and long time treasurer of the Potomac Company. With the election of the company's leadership, the meeting adjourned in October 1784.

The October meeting held at "the Old Tumpkin Gate" outside Alexandria established the regulations and administration of the company. It was decided that annual meetings would be held every December at which time the directors would be required to make a progress report for

the previous year, while the treasurer was to make a detailed financial statement of the company's collections and expenditures. The meeting also authorized regulations governing the meetings of the leadership and replacement of directors, and the voters and first company officers would receive for these services. Finally, the meeting resolved to petition the legislature for changes to the company's charter. The directors asked that they be allowed to increase the width of the proposed road to at least fifty feet and that the capital of the company be increased beyond the original \$50,000. In addition, they requested that the shares of delinquent subscribers not be forfeited to the company; instead, the directors sought permission to sue delinquents for the full amount of their shares.<sup>10</sup>

The legislature responded quickly to the company's request and in January 1885 authorized the directors to extend the width of the corridor to fifty feet, increase the capital of the company by \$50,000 (to a total of \$100,000), and sue delinquent subscribers. In addition, the new legislation elaborated on the turnpike's operations. Weight and wheel width restrictions were established and the company empowered to fine offenders. The statute set day and date for the collection of tolls, and for share transfers who failed to pass to the right. The directors were authorized to let out portions of the road after its completion and required to make regular financial reports to the legislature. Tolls, clearly marked at each turnpike gate, could be raised if dividends fell below 4 percent, but profits

could not run above 12 percent per annum. With these new regulations in place, the company was ready to proceed with laying out the route of the temple road.<sup>27</sup>

The directors appointed Simon Sommers to chart the most appropriate route for the temple. As he noted later, his greatest concern was to enhance "the public good" and chart the most direct line between Alexandria and the Little River. He chose an entirely new path, running parallel to but a few miles north of the Colchester Road. It represented, however, a fairly direct path between the southeast corner of Alexandria on the Fairfax County court house, to the Little River. This route Sommers maintained, was "more level" than the old road through Centerville, crossed fewer rivers, and was "near two miles shorter." He also discovered that there was more "black and white stone on the new route" which could be utilized in the construction of the road surface. In light of these advantages Sommers concluded that "the new route" would "cost considerably less money than the old way" and would be "more advantageous to the Stockholders." In making his decision Sommers concentrated on technical questions. As a surveyor this was, of course, his primary concern. However, as long as he failed to consider the local political and economic implications of his decision, how they would be apparent to all.<sup>28</sup>

In September 1853 the debate over the turnpike's route entered the public realm. "A Subscriber" writing in an Alexandria newspaper argued that there could be little gained by choosing the coast-land route. The Centerville Road, he argued, was only one or two miles longer than the new route, but it would save the "additional expense" of "opening a new road." More important, the coast-land route would draw far less traffic (and tolls) because the farmers "coming from Freewater, Culpepper, the upper end of Prince William, and from beyond the Blue Ridge, through Thornton's Gap" perhaps "one third" of the present traffic on the Centerville highway would find it more convenient to continue using the Centerville Road than to turn out of their way to use a turnpike. Finally, Subscribers worried that "the joy-riders in the upper country" who had subsisted in the company would forfeit their deposits if the more northerly route was chosen; in contrast, the Centerville Road would attract large numbers of new subscribers among the farmers in the north and west of Loudoun. A month later Subscriber added that when the Potomac and Shenandoah Rivers were closed for year-round navigation (which he shortly expected) they would "take down a great quantity of the produce within reach of them." The road traffic from the lower valley and from farmers "living within ten miles of the Potomac" would be lost to the turnpike if it decided upon the coast-land route. The result, he concluded, would "be no other than greatest disappointment both to the public and the Stockholders."<sup>17</sup>

The parlance of the court-house case could not let such attitudes go uncorrected, particularly since the directors had decided that they would choose the route November 5. In late October "A Stockholder" entered the controversy, arguing that the distances of court-house route would in the aggregate save tens of thousands of miles and dollars every year. Equally important, Stockholder believed that the route should seek to reach the country which would "naturally dispose" its produce in Alexandria, Loudoun County and the lower valley. The route was necessary to ensure that this region "surpassed by no part of America in fertility of soil, valuable productions, and . . . in the skill, industry and morals of the inhabitants" had a permanent and reliable means to transport its produce to the coast. Moreover, the Potomac and Shenandoah Rivers, lacking sufficient water for navigation "three-fourths of the year" could never replace overland transport, and if the court-house route was not built, the produce of the region would be conveyed to Washington or Baltimore. As for the farmers to the southeast in upper Prince William and Pasquot counties, they looked "naturally" to Dismal and Alexandria could never expect to capture that trade. In short, the court-house route "will be the most advantageous to the inhabitants of . . . Alexandria, and of the adjacent country of every class and description."<sup>20</sup>

No official account of the November 5 meeting of the directors survives, but George Gilpin, one of company's leaders, published a lengthy

protest against the action on November 17. It must have been a heated response. At the meeting Gilpin and president Keith presented a petition, signed by stockholders representing 187 shares, requesting that the vote on the turnpike's route be postponed until after the company's December elections. However, the three remaining directors determined to proceed with the selection of the turnpike route. They voted over Gilpin and Keith's strenuous objections, in favor of the court-house route. Gilpin closed his protest with a spirited defense of the Centerville Road, arguing that it would "bring to the Alexandria market that produce which is now sent to Falmouth and Fredericksburgh" from upper Prince William. Frequent and the middle valley countries. The same day, he and Keith published a second protest, calling for the directors to postpone the implementation their decision until after the December elections. The protest declared they noted "had served some fourteen months, two more than the company's charter allowed. Keith and Gilpin believed that "delivery requires us to" leave all "important questions" to those who might be chosen by the shareholders in December."<sup>1</sup>

However much the three remaining directors wished to put the question behind them, Keith and Gilpin's protest transformed the December elections into a referendum on the turnpike's route. Over the course of November and early December supporters of both sides waged a contentious newspaper war which ultimately devolved into personal attacks and charges

of self-interest. Supporters of the coast-harbor route, for example, charged Keith with wrong'head in the vicinity of Centerville, and being more concerned with elevating the value of his properties than enhancing the interests of the general public or the shareholders. Proponents of the Centerville Road made similar charges against those who supported the coast-harbor route.<sup>10</sup> However, the contest involved several two substantive issues. First, would the route of the northern Turnpike ever replace land transport of produce to market? and second, how far did (or would) Alexandria's hinterland extend?

As coast-harbor road proponents Charles Lee, Samuel Ogden, and Keith's close associates with the Potomac River project clearly influenced their support for the Centerville route. But they were not alone. "Some of the ablest men" in the region, "the Alexandria Stockholder" reminded readers, were convinced "the greater part of the produce" of the lower valley and Loudoun County "will pass by water" to Alexandria. If built, the northern road would be forced to compete with this direct navigation, and given the choice between water and land transport farmers would opt for the former. Consequently, turnpike traffic and toll-collectors would be insufficient to cover the costs of construction. That volume of traffic was not the only reason for supporting the Centerville Road. Proponents believed it offered an excellent opportunity to expand the trade of Alexandria. The southern route, they argued, would enable merchants of the town to enlarge

their economic interests, to attract new customers to the southeast and as the process transformed the town into Virginia's primary market. Proponents of the Craterville Road possessed an imperialist vision of Alexandria's economic possibilities. They sought to transform the town into "a mart . . . not only for the present, but . . . for ages to come."<sup>42</sup>

Supporters of the northern route, sounding a more cautious tone, demanded such forecasts as fanciful and pointed to the unreliable nature of water transport and the need to secure Alexandria's "natural" hinterland from northern competition. "The long is great deal too long," wrote "Straight Way," the merchants and farmers of the region have suffered under the "obstacle" that "opening the Potomac navigation would render the Turnpike Road useless and unprofitable." In fact, farmers would much rather transport their produce by land "than run the risk of water carriage," particularly in the winter when "the navigation of the Potomac and Alexandria, can never be safe." With water transport "there will always be some risk or injury" land transport was slower but more reliable. Moreover, if the southern route prevailed, Georgetown, Washington, and Baltimore would easily capture the trade of Loudoun and the lower valley, and the volume of produce from Prince William and Fairfax could never replace such a loss. In seeking to expand to the south, court house road defenders contended, Alexandria's merchants would "let go the substance" of their trade to "grasp" at a "shadow."<sup>43</sup>

The election for new directors took place on December 3, with both sides presenting a slate of candidates prior to the vote. The election, however, was unadorned. The court-house road advocates won by over 300 votes, and Calves and Keith failed to gain reelection.<sup>41</sup> With the northern route now a reality, turnpike construction could begin ahead. In the first year the company had completed work on the narrow-gauged section of the turnpike closest to Alexandria. The directors had retained contractors to carry out the work and labor had been provided by local titheholders. In lieu of state financial aid, the 1800 amendment to the company's charter had empowered the directors to recruit male titheholders living within three miles of the turnpike to work on the road up to ten days a year. While construction proceeded through heavily populated portions of Fairfax County this device provided a sufficient labor pool, as the turnpike skirted Fairfax's most urban, however, it entered a more sparsely populated region. Contractor Richard Keithfille was at this point compelled to hire slave labor to supply the deficiency. The rest of the turnpike would largely be completed using hired slaves.<sup>42</sup>

In December 1804 the directors reported they had completed the road for about eight miles at a cost of \$12,000 per mile. They continued, moreover, that the hardest part of the work had been executed. The topography of the land made construction of the first portion of the turnpike by far the most complicated; on the remaining portions of the road there were "few or no

hills to reflect, and the ground in general" was "better adapted for a road." Just as important, the directors had developed the "experience . . . necessary" to direct the work efficiently.<sup>10</sup> Yet the project still faced some difficult obstacles. The most pressing problem was financial. The directors first requested that shareholders pay a \$10 advance to the company in December 1892. By December 1894 four such calls had been made which should have generated the company approximately \$40,000. Yet despite expending just over this amount on road construction, the directors reported that the company owed over \$4,000 in December 1894.<sup>11</sup>

Delinquent subscribers threatened the financial viability of the project. The problem arose as early as September 1892 and it continued throughout the early life of the corporation. The directors threatened delinquents with legal action and reminded them of the project's importance to Alexander's trade, but neither tactic worked particularly well. In December 1894 the annual meeting of subscribers authorized three new strategies to ensure the company's solvency. First, shareholders empowered the directors to open new subscription books for the sale of an additional 500 bonded shares. These went on sale in March 1895 and potentially the company stood to gain an additional \$50,000 in capital. Second, to overcome any short-term financial distress the directors were authorized to borrow from banks in the District of Columbia or individuals such "Banks of Money as they may deem necessary for making the Turquoise road."<sup>12</sup>

Finally, the decision pertained to the state regarding financial aid. The legislature responded by purchasing 100 shares in gold to be sold under terms from Franklin, Louisiana and the lower valley. Though the state generally used this money to offset the cost of county salaries, the legislature noted that the "appropriation of master fees to objects of external improvement, is . . . an act dictated by wise policy."<sup>10</sup>

These three sources provided the company with the financial stability it needed to carry forward construction. In October 1806 the first ten mile section of the road was completed at an expense of \$40,000, and the first tolls collected. By the end of 1809 the company had opened another fifteen mile stretch of the road. Finally, in January 1813 governor James Barbour authorized the company to collect tolls on the final eight miles of the turnpike. The company had by this time completed the road with a stone and gravel surface its full length of thirty-four miles. Over the life of the turnpike the company continued to improve the surface and during the 1850s the road was macadamized.<sup>11</sup>

Where did the money to complete the road come from? Master fees contributed significantly to the company's coffers. Between 1805 and 1818 over \$10,000 was collected from this source (reflecting the state's purchase of 100 shares). In the same period the company borrowed some \$16,000 from local District of Columbia banks, particularly the Bank of Alexandria (Shall, previous shareholders provided the primary source of funds for road

construction. By 1817 the company's capital stock amounted to £150,000 (including the shares owned by the state), reflecting further subscriptions of 500 and 150 shares in 1805 and 1809.<sup>10</sup> In addition, over \$60,000-worth of tolls collected between 1805 and 1817 were plowed back into construction. In all, the company spent approximately \$250,000, or almost \$4,000 per mile, to build and upgrade the road by 1817.<sup>11</sup>

The successful completion of the turnpike led to a sharp increase in traffic heading to Alexandria. In 1808, the first year the company was legally able to charge users, only \$791 in tolls was collected. By 1809, with over twenty-five miles of the turnpike built, tolls had risen to \$6,336. After the company completed the full thirty-four miles of the turnpike in 1812, toll receipts climbed to \$11,343.24. Over the next four years tolls never dropped below \$16,000, and in 1818 they peaked at just under \$26,000. Despite these impressive figures (over \$200,000 collected in the first eleven years of operation), only twice did investors receive dividends, in 1812 when the company dispersed \$11,000 in unsubscribed shares and in 1820 when a dividend of \$33,000 was paid. Each year compensation for shareholders was not received, few privately built turnpikes in the United States turned a profit.<sup>12</sup>

Still, contemporaries viewed the project as a remarkable success. Indeed, the Little River Turnpike became a model for future road-building projects in Virginia. Experimentation in methods of road construction in

Virginia during the postwar era gave way in 1818 and 1819 to a systematic effort to improve the state's roads by the creation of a Board for Internal Improvements and a Board of Public Works designed to approve and partially finance turnpike projects. Thereafter, state-supported private turnpikes, a pattern first established on projects such as the Little River Turnpike, became the primary means of improving Virginia's overland transport. The success of the Little River Road played an important role in the decision to implement the new policy. Notably, the proposal to create a Board of Public Works and internal improvement fund in Virginia originated with Charles Foster Moore, a resident of Loudoun County and after 1808 a director of the company. Similarly, the decision to use toll receipts to upgrade the road distinguished the Little River Turnpike as one of the best constructed in Virginia prior to the Civil War.<sup>51</sup>

More important, contemporaries believed that the turnpike was essential to the prosperity of northern Virginia. Toll receipts indicate that business flowed to the road, and throughout the first and second decades of the nineteenth century—except during Jefferson's Embargo and the War of 1812—Alexandria's export trade boomed.<sup>52</sup> Equally revealing, new private companies were established in 1810 to improve the roads between the Little River and Shaker's rail Ashby's Gap, and by 1815 travelers made the trip from the Blue Ridge to Alexandria entirely on improved turnpikes.<sup>53</sup>

The push to improve Alexandria's connection with its western hinterland took a circuitous path, but with the creation of the Little River Turnpike Company the region's residents finally devised an effective solution. Traveling west from Alexandria in 1850, a traveler noted that "the preceding day" he had passed almost one hundred "waggons [sic] conveying flour to" the town. The road, he continued, "was full from morning till long after dark; . . . it appeared that it was to have an end."<sup>18</sup> Unfortunately it did, Alexandria's economy declined in the years after 1850. Yet the continuing efforts to build a better road system in northern Virginia after 1790 reveals the desire of many residents to enhance the region's market access and economic development. Here was yet another indication of the depth of the "projecting spirit" in northern Virginia.

#### Notes

1. *Virginia Journal and Alexandria Advertiser*, December 28, 1794; James Madison Manuscript, 1794-1795; Clifford Hume, ed., *The Writings of James Madison*, 9 Volumes (New York: G.P. Putnam's Sons, 1902-1910), I: 104-105; Philip Morrison Rice, "Internal Improvements in Virginia, 1775-1840," Ph.D. Dissertation, University of North Carolina, 1946, 34-35-40.

2. William Albert, *The Turnpike Road System in England, 1663-1840* (Cambridge: Cambridge University Press, 1972), 8, 11, 14-16; W.W. Rostock, ed., *The Statutes at Large, Being a Collection of all the Laws of Virginia, from the . . . Year 1607*, 12 Volumes (Richmond, New York, and Philadelphia: 1829/1832), I: 151, 156-57, 203-5, 209-285, 22, 174-180; William Ogden Foster, *County Government in Virginia, 1607-1864* (New York: Columbia University Press, 1967), 121-125; Thomas Jefferson, *Notes on the State of Virginia*, William Peden, ed. (Chapel Hill: University of North Carolina Press, 1955), 181-182; Edward Graham Roberts, "The Roads of Virginia, 1607-1840," Ph.D. Dissertation, University of Virginia, 1958, 24-25, 26-27-48. Similar opinions of local road maintenance and construction,

following English precedent, existed throughout the United States; see, Joseph Austin Drexelberger, *Through the Toll Road: A Study in the Toll Road Movement in the Middle States and Maryland* (Frederick, Md.: Southern Railway and Printing Company, 1922; 1928).

3. A.D. Bradley, ed., *The Journal of Nicholas Cigaretelli, 1716-1777* (New York: Knopf Press, 1949); 47, 81. Johnson David Schuyler, *Travels in the Carolinas*, 2 Volumes Alfred J. Marston, ed. (New York: Harper & Brothers, 1898; originally published, 1788); 3-35, John Edwards Caldwell, *A Tour Through Part of Virginia in the Summer of 1808* . . . , William H.E. Schell, ed. (Richmond: Dove Press, 1951; originally published, Baltimore 1810); 48. John Howard, *Scenery of the American Tidewater*, Lawrence Haines and Boulder Matthews, eds. (New York: Harper & Brothers, 1897); 128. Of course, when the weather was dry travelers made fewer complaints. Robert Hunter, a London merchant, described the roads of the lower northern neck as "very dry—I think better than any other part of America." Lewis E. Wright and Maria Taylor, eds., *Journal in Carolina in 1765-1766, Being the Travel Diary and Observations of Robert Hunter, Jr., a Young Merchant of London* (San Marino, Cal.: Huntington Library, 1948), 801.

4. Adam Smith, *An Inquiry into the Causes of the Wealth of Nations*, 2 Volumes, Edwin Cannan, ed. (Chicago: University of Chicago Press, 1976; edition originally published, 1804); 1-145. Harry Pagar to Samuel Martin, March 22, 1714; Harry Pagar Letterbook, 1707-1770, Alderman Library, University of Virginia, Charlottesville, Virginia (hereafter UVA); Joseph Riddle to [?], January 1802; Riddle to [?], January 1803; and Riddle to James Dall, February 5, 1803; Joseph Riddle & Co., Alexandria City Letterbook, 1800-1803-1844, Library of Virginia, Richmond, Virginia (hereafter LVA); November 23, 1795, Frederick County Legislative Petition, 1770-1806; LVA, October 4, 1799; Loudoun County Legislative Petition, 1770-1806; LVA.

5. Washington to Patrick Henry, November 30, 1795, John C. Fitzpatrick, ed., *The Writings of George Washington from the Original Manuscript Sources, 1755-1799*, 39 Volumes (Washington: U.S. Government Printing Office, 1901-1944); 28-134-135; see also Washington to James Madison, November 30, 1795 *ibid.*, 28-227-228; and Rice, "Internal Improvements," 41-42.

6. On the problems associated with English roads, see Albert Thompson, *Road System in England*, 14-32.

7. James Clayton Bradford, "Society and Government in Loudoun County, Virginia, 1710-1800," Ph.D. Dissertation, University of Virginia, 1974; 41-47; Pauline Karseson, *Landedness of Old Friesen William: Study of*

*Drains in Northern Virginia*, 2 Volumes (Richmond: Old Dominion Press, 1904) 2: 470-484; Timothy J. Hall, "The Drains of West Kent and the Little River Township: Urbanization and Regional Change in Northern Virginia, 1700-1800," M.A. Thesis, Washington State University, 1993, 9; and Robert D. Marshall, *Commonwealth and Frontier: Proprietors in the Early Shenandoah Valley* (Charlottesville: University Press of Virginia, 1973), 149-152, 149-154. There were three important north-south routes in the region: the main post road (the "Potomac Path") extended from the Alexandria to Colchester, Swanton and Fredericksburg; the Carolina Road entered Loudoun County where the Potomac River met the Monocacy and traveled south to Leesburg and on to Hagerstown in Prince William County and the Philadelphia Wagon Road entered Berkeley County at Shepherdstown and extended the full length of the Shenandoah Valley.

8. Breckford, "Loudoun County," 61, 63-68; Harrison, *GM.Press Edition*, 3: 561-608; November 14, 1795, Loudoun County Legislative Petitions, LCY. See also November 28, 1795, *ibid.*, which expresses similar complaints.

9. *House Statutes at Large*, 2: 546-548; John Frederick Kennedy, ed., *Journal of the House of Burgesses of Virginia, 1761-1775* (Richmond, 1899), 326; Nina Baymerton, *Donald Oving: James Armand, Fairfax County, Virginia, A History* (Fairfax: Fairfax Board of County Commissioners, 1915), 13-15; Harrison, *GM.Press Edition*, 3: 563-565.

10. Roberts, "Roads of Virginia," 45; see also Egan, "Interval Improvements," 144.

11. *House Statutes of Virginia*, 12: 70-85; Dornseiberger, *Tarapacks*, 37-38; Frederic J. Wood, *The Tarapacks of New England, and the Evolution of the Stone-Bench, England, Virginia, and Maryland* (Boston: Marshall Jones Company, 1918), 7-8.

12. *House Statutes at Large*, 12: 175-184. Petitioners sent from Fairfax and Loudoun counties explicitly stated that "the Road to Colchester is taken as Notice of" November 28, 1795. Fairfax County Legislative Petitions, 1778-1805; and November 28, 1795, Loudoun County Legislative Petitions, LCY.

13. *Robert Tarapack Road Survey*, 19-20; *Fairfax County Government*, 195; Wood, *Tarapacks of New England*, 7. A number system of tarapack construction carried out by county commissioners was instituted in Maryland in 1752. Though most of the labor was provided by vagrants and servants (see William Hethfield, *Shallcrosses Made Easy: History of the*

*Townships of Baltimore City and County* (Cockeysville, MD: Baltimore County Historical Society, 1981), 1-3.

14. November 24, 1787. Fairfax County Legislative Petitions: November 24, 1787. Loudoun County Legislative Petitions, LCV. The Fairfax County petition is reprinted in Robert A. Rutland, ed., *The Papers of George Mason, 1721-1792*, 3 Volumes (Chapel Hill: University of North Carolina Press, 1970), 3: 1010-1019.

15. *ibid.*, 3: 732-737, 780-790, 3: 1010. Mason remained true enough in 1789 to write a petition asking for the removal of the Fairfax courthouse from Alexandria, which was effected in December 1789: see, November 8, 1789, Fairfax County Legislative Petitions, LCV, and *House of Burgesses at Large*, 13-19. Mason's opposition to the Federal Convention in 1787 which the leaders of Alexandria overwhelmingly supported, appears to have transformed a personal squabble into a political one, see Rutland, *Papers of Mason*, 3: 1019.

16. November 24, 1787. George Gilpin and Charles Lattin, Fairfax County Legislative Petitions, LCV; Rutland, *Papers of Mason*, 3: 1019, 1023-1024. *House of Burgesses at Large*, 17: 502-507.

17. Nathaniel, Fairfax County, 148-147. October 13, 1793. Loudoun County Legislative Petitions, LCV.

18. October 10, 1793, and November 8, 1793, Berkeley County Legislative Petitions, 1776-1800. October 5, 1794, Frederick County Legislative Petitions; November 4, 1793, Fairfax County Legislative Petitions: see also, [?] 1790, Alexandria City Legislative Petitions, 1776-1800, all in LCV.

19. November 14, 1788. October 9 and 13, 1792. October 23, 1793. Loudoun County Legislative Petitions, LCV, and also *Resolved*, "Loudoun County," 50-54. Similar problems involving labor caused everywhere a compulsory labor system started, for the breakdown of the system in New York see Daniel B. Klein and John Mayewski, "Economy, Community, and Law: The Turnpike Movement in New York, 1791-1840," *Law and Society Review* 26 (1992), 473-497. For the problems in other states, see *Turnpike*; *Turnpikes*, 95, 10-14.

20. The only act passed by the Virginia legislature between 1791 and 1794 dealing with the roads of the region was an amendment of the 1791 road law which stipulated that turnpike drivers within three miles of a courthouse should work no more than three days each year, required better bookkeeping by the toll-payers and commissioners, and ordered that one

half of the tolls collected on western Virginia's turnpike "shall be applied towards repairing the roads within the county of Loudoun". see *History Statistics of Loudoun*, 34-47

21 Joseph Stancliffe Davis, *Roads in the Early History of American Corporations*, 2 Volumes (New York: Russell & Russell, 1965 originally published, 1917), 2: 148-167, 216-220; *Overcomings*, Turnpike, 51-52; Wood, *Turnpikes of New England*, 11-12; and Darwin H. Hoopes, *The Transfer of Early Industrial Technologies to America* (Philadelphia: American Philosophical Society, 1987), 47-62. On June 4, 1790, 1,500 shares valued at \$300 each, went on sale in Philadelphia and Lancaster. Within hours the shares were oversubscribed and the directors of the company resorted to a lottery in order to determine which of the 2,174 subscriptions would stand.

22 November 18, 1795, Loudoun County Legislative Petition; November 13, 1795, Frederick County Legislative Petition. LOW. Richard Elwood Lee was the primary mover behind the creation of the new turnpike road. Writing on October 29, 1795, Elwood noted that at the next meeting of the Virginia Legislature he planned "to obtain a law incorporating a company of subscribers for making a turnpike road from Alexandria towards Winchester", quoted in Russell, "Loudoun County," 58.

23 November 13, 1795, Loudoun County Legislative Petition, LOW.

24 For the early history of corporations in England and America see, Davis, *History of American Corporations*, 1-2, 307; and James Willard Hurst, *The Legitimacy of the Business Corporation in the Law of the United States, 1790-1870* (Charlottesville: University Press of Virginia, 1970), 1-9.

25 Gordon S. Wood, *The Endurance of the American Revolution* (New York: Alfred A. Knopf, 1980), 113-120; "Incorporating the Republic: The Corporation in Antebellum Political Culture," *Harvard Law Review*, 90 (1976-1988-1989); Hurst, *Legitimacy of the Business Corporation*, 30-43; John Taylor, *Antislavery Issues in Series of Agricultural Essays, Practical and Political*, 19 *Shanty-Croft Numbers*, Fourth Edition (Petersburg: Whitworth & Young, 1819, originally published 1810), 39-42-43; Robert S. Ralston, *John Taylor of Caroline: Pastoral Republican* (Columbia: University of South Carolina Press, 1988), 19-19, 179-180. Taylor and other radical Jeffersonians of his ilk derived their anti-corporate ideas from Adam Smith, see Davis [McCoy], *The Elusive Republic: Political Economy in Jeffersonian America* (New York: W.W. Norton, 1986), 52-60.

28. For evidence of opposition to turnpike companies see, Greenhalghs, *Turnpikes*, 82-83; Klein and Margolis, "Economic Community and Law," 480-495; Davis, *History of American Transportation*, 7-118-233, 364-387. Legislation to turnpike systems in have been most pronounced in northeastern Rhode Island see, Donald P. Jensen, "Commercial Progress versus Local Rights: Turnpike Building in Northeastern Rhode Island in the 1790s," *Rhode Island History* 41 (2006): 50-58.

29. November 13, 1793, Loudoun County Legislative Petition, LOV.

30. *ibid.* The town of Centerville was incorporated in 1793, see, October 2, 1793, Loudoun County Legislative Petition, LOV, and *Pennsylvania Statutes at Large*, 13: 554-581. See also, Eugene R. Smith, *Centerville, Virginia: Its History and Architecture* (Purcell, VA: Purcell Board of Supervisors, 1973): 39-42; and Lawrence M. Mitchell, "The Centerville Community-1793-1899," *Historical Society of Fairfax County, Virginia, Inc., Yearbook* 4 (1995): 26-39-42-45. At least eleven individuals who signed the petition opposing the turnpike were residents or landowners of Centerville. On the language employed in similar local economic contests see, Wendell B. Rothberg, "The Road Promethues," *Services in American History* 45 (December 2007): 323. Comparable local struggles over the routes of turnpikes occurred in Pennsylvania see, Donald C. Jackson, "Roads Must Travel!": Turnpikes in Southeastern Pennsylvania in the Early Republic," *Early American Technology: History and Design Themed from the Colonial Era to 1820* Judith McIhew, ed. (Chapel Hill: University of North Carolina, 1994): 219-220.

31. Samuel Shephard, ed., *The Statutes at Large of Virginia, from 1792 to 1808*, 3 Volumes (New York: Aldine Press, Inc., 1970) originally published (Richmond: 1805): 1: 379-388 (Fairfax and Loudoun, and Mettleville except see), 374-375 (Quantum Company). I have found no extant petition for the Mettleville Company; however, a notice that such a petition would be sent to the legislature during its next sitting was published in the *Edinburgh Mirror and Alexandria Gazette*, July 23, 1793. Of the five active respondents appointed by the act to open subscription books for the Mettleville Company (Richard Conway, John Peter Joseph Thompson, Robert Young, and William Hodgson) only Hodgson was not a present or future shareholder in the Quantum Company see Appendix 2 (Young purchased his shares in 1809). A notice of an impending petition regarding the Quantum Company was published in the *Edinburgh Journal and Dispatch Weekly Advertiser*, October 8, 1793. The result to a private company was taken only after plans for a lottery to raise funds to clear the creek failed see *ibid.*, July 17, 1794. The Quantum Company survived in 1824. On the decline of Danforth after 1798 see, Harrison, *Gill Creek*.

*Williams*, 2: 284-293; Arthur G. Peterson, "The Alexandria Market Prior to the Civil War," *Williams and Mary Quarterly*, 2nd Ser., 12 (April 1955), 194-195, and Henry J. Storkley, "The Port of Swanton, Prince William County, Virginia," *Williams and Mary Quarterly*, 2nd Ser., 4 (April 1948), 143-144.

38. Heywood, *Statistics at Large*, 1: 373-387. The Middleville Company's set of correspondence contained the same processes with the exception of the following: the capital stock was set at \$40,000 (800 shares at \$50 each); the company could begin operations when 200 shares purchased by fifty or more individuals had been subscribed; and the toll rates differed; *ibid.*, 1: 387-388.

39. *Ibid.*, 1: 382. According to H. W. Johnson a grade of five degrees equaled a rise of six feet nine inches over a horizontal distance of ninety feet; see, *Rural Economy: Constructing a System on Two Building.... On Building in General.... On the Culture of the Vine and On Turnpike Roads* (New York: William Clow, 1809), 203. For a discussion of the "problem of grades" see Robert F. Hunter, "Turnpike Construction in Antislavery Virginia," *Technology and Culture* 4 (Spring 1963), 358-379, who notes that while post-revolution engineers recommended grades of two to three degrees, as previous turnpike grades often exceeded five degrees.

40. Johnson, *Rural Economy*, 204-205. Simon De Witt Woodford, *A Treatise on Roads, Their Merits, Character and Utility, Being the Substance of Two Lectures Delivered before the Young Men's Association of the City of Albany* (Albany: Oliver Earl, 1838), 122-124. Hunter, "Turnpike Construction," 372-382. Jackson, "Roads Most Traveled," 204-205, 220-223.

41. Albert Gallatin, "Report on Roads and Canals," *American State Papers, Documents, Legislation and Executive of the Congress of the United States*, Class 32, Miscellaneous, 2182-2222, 2: Volcanos (Washington: Gales and Benson, 1824), 1: 729. Floodproof, *Engineering on Roads*, 184-176, 188, 189, 203-184. *Alexandria Examiner*, May 17, 1865. Hunter, "Turnpike Construction," 373-374; Jackson, "Roads Most Traveled," 204.

42. Gallatin, in the "Report on Roads and Canals," 171, noted that many turnpikes in the United States were "constructed with cheaper methods." Such roads were particularly prevalent in New York and New Jersey; see, *Dunbarbarger*, 64-67. The majority of Virginia's turnpike roads built after 1815 were also un surfaced; see Hunter, "Turnpike Construction," 373-374. That these methods appear to have been common does not mean they were uncorrected. In 1868 H. W. Johnson, for example, recommended the use of "macadam roads" which lay below the level of the surrounding land and were "bellow or low in the middle" see, *Rural Economy*, 214-216.

50. *Shepherd, Statistics at Large*: 1-349.

51. Hunter, "Turnpike Construction," 189; Jackson, "Roads Most Traveled," 320-330; *Alexandria Gazette*, May 12, 1846; *Shoepford, Treatise on Roads*, 130-132; Roberts, "Roads of Virginia," 74-76.

52. Gellatly, "Report on Roads and Canals," 739; *Shoepford, Treatise on Roads*, 47, 138-139, Jackson, "Roads Most Traveled," 330-331; Hunter, "Turnpike Construction," 189-196; Duerksenberger, *Turnpikes*, 38-50.

53. *Columbian Messenger and Alexandria Gazette*: February 18, 25, and March 1, 1796. As few pieces of the *Alexandria* and *Washington* newspapers survive from this period it is difficult to determine the extent of the promotional campaign for the two turnpikes.

54. Davis, *History of American Corporations*, 2: 340-342. Maryland created its first private turnpike company in 1798; four more were created between 1798 and 1800; see Duerksenberger, *Turnpikes*, 38-39.

55. *Columbian Messenger and Alexandria Gazette*: November 15, 1798 (Thursday edition); *Id.*, June 21, 1797 and June 22, 1798 (announcements of county turnpike commissions).

56. There were at least eight private corporations created for various purposes in northern Virginia between 1790 and 1820: the Potomac Company (1792), the Bank of Alexandria (1792), the Fairfax and Loudoun and Manassasville Turnpikes (1798), the Quantico Company (1798), the Alexandria River Company (1798), the Alexandria Marine Insurance Company (1799), and the Little River Turnpike Company (1802).

57. *Columbian Messenger and Alexandria Gazette*: November 18, 1798, Bk.1, "Origins of West Ind.," 84-85. Bk.1, "Internal Improvements," 51; *Shoepford, Statistics at Large*, 2: 363.

58. *Alexandria Advertiser*, August 24, 1797 and August 25, 1798 (issues of petition); *Columbian Messenger and Alexandria Gazette*, June 22, 1798 (petition), *Alexandria Advertiser and District of Columbia Daily Advertiser*, August 15, 1798 (new toll collected). The appearance of "turnpikes" on northern turnpikes is detailed in Duerksenberger, *Turnpikes*, 76-79; George Rogers Taylor, *The Transportation Revolution, 1820-1860* (New York: Random & Company, 1937), 28; and Kiss and Mayhew, "Economy, Consistency, and Law," 454-485.

59. *Columbian Messenger and Alexandria Gazette*: June 5 and July 7, 1800.

45 December 8, 1880 Loudoun County Legislative Petitions, LCV  
(Pencil postmark attached) *Shepherd, Statistics at Large*, 3: 298-300

46 *Times and District of Columbia Daily Advertiser*, April 28 and August 17, 1884. The other correspondents were John Lenthgen (London), Edward Benson (Berkeley) and F. Williams (Frederick). The commissioners from Shenandoah did not sign the August report.

47 December 5, 1787, Loudoun County Legislative Petitions, LCV, Damselouper, Dargglen, 88, 46-48 Roberts, "Raid of Virginia," 32, *History, Statistics at Large*, 13: 64, 175, Virginia Gazette and Alexandria Advertiser, September 23, 1780 and February 10, 1783. See also "Resolution of the Managers of the Alexandria Lottery," November 30, 1780, Alexandria Virginia Lottery Virginia Historical Society, Richmond, Virginia. (Inventory V185) which reveals that slave labor sales funded the managers of the lottery to add \$1000 in profits.

48 *Shepherd, Statistics at Large*, 3: 130-131 December 10, 1880 and December 18, 1888 Loudoun County Legislative Petitions, LCV-*Shepherd, Statistics at Large*, 3: 56. Lotteries were a popular method of raising money in the early republic, and had numerous precedents in England. They enabled private persons to raise capital in amounts far exceeding what was possible individually and allowed governments, as in northern Virginia's roadbuilding projects, to collect revenues without the unpopular expedient of raising taxes, see, Edwin J. Perkins, *American Public Finance and Financial Reform, 1788-1815* Columbia: Ohio State University, 1994, 200-209. In contrast see, Joyce Chaplin, *An American Passage: Americans, Europeans and Modernity in the Lower South, 1733-1803* Chapel Hill: University of North Carolina Press, 1997, 179-182, who concludes that lotteries were an "early modern" form of finance because "they revealed economic thinking of its least rational [18th]. Though true, this statement ignores the requirements to general government funding of improvements such as road building." In particular, it overlooks the widespread opposition to higher taxes and the equally as rational belief that the actual costs of roads should pay for their upkeep.

49 *Shepherd, Statistics at Large*, 3: 343-348. Curiously, no petitions survive regarding the creation of the Little River Turnpike Company. However, as late 1803 some valley residents noted that "the law was produced by petitioners from the counties of Loudoun, Berkeley [and Frederick, and Shenandoah]", see, *Alexandria Advertiser and Commercial Intelligence*, December 1, 1803. Hille, "Dragons of the West End," 80, argues that the public meeting held in Alexandria on May 5, 1801 produced a similar petition, but I have discovered no evidence to corroborate his statement. It is difficult to believe, however, that the Virginia Legislature

would have authorized the company in the absence of local support; the success of the enterprise depended upon the initiative and patronage of the community.

50. *Times*, and *Portrait of Columbia Daily Advertiser*, April 26, 1802 (subscription took up); *Alexandria Advertiser and Commercial Intelligence*, April 26 (subscription took up); and July 22, 1802 (first of set); *Columbia Advertiser and Commercial, Mechanical, and Agricultural Gazette*, August 4, 1802 (first of set and "A Fellow Citizen").

51. In order to increase subscriptions some of the constituents allowed investors to subscribe without paying the required deposit. In mid-September before the first meeting of the company, these subscribers were asked to pay their deposit so "that may prevent any objection to the votes at the election for Directors." The law required the money to be paid at the time of subscription"; *ibid.*, September 18, 1802 and *Alexandria Advertiser and Commercial Intelligence*, September 18, 1802. No list of original subscribers is extant though one reader in 1822 noted that "their failure of the burden of the road will fall upon the subscribers of Alexandria"; *ibid.*, October 3, 1822, see also *ibid.*, October 27, 1802.

52. *Columbia Advertiser and Commercial, Mechanical, and Agricultural Gazette*, August 8 (stocks nearly sold); August 11 ("A Subscriber") and August 18, 1802 (meeting of subscribers); *Alexandria Advertiser and Commercial Intelligence*, August 18, 1802 (meeting of subscribers) see also *ibid.*, October 28, 1802.

53. Oscar and Mary F. Handlin, "Origins of the American Business Corporation," *Journal of Economic History* 9 (May 1949): 38. Harriet Lamentance of the *Business Corporation*, 17-18; Klein and Margolis, "Economic Community and Law," 387-378, 504-502, 580; *Columbia Advertiser and Commercial, Mechanical, and Agricultural Gazette*, August 8, 1802. According to Douglas R. Egerton, *Charles Francis Mather and the Trail of National Concentrating Operations* (University of Mississippi 1989), 57-58. Mather saw his ownership of shares in the Little River Turnpike as a "long term investment" designed to promote the economy of northern Virginia rather than a source of quick profits.

54. The political battles in the early republic and Virginia after the mid-1790s are best recounted in Richard Beal, Jr., *Securing the Republic: Ideology in American Politics, 1788-1815* (Ithaca: Cornell University Press, 1979): 54-71, 85-89, 244-264; Lyle A. Bow, *Federalism in Democracy: The Federalists in the South, 1788-1798* (Lexington: University of Kentucky Press, 1968): 112-120, 124-127, 167-168, 210-220, 248-252, 261, 287; Norman K. Denzler, *Democratic Politics, 1793-1808* (New York: Columbia

University Press: 1978: 425-427, 536-537, 534-542, 540-542, and Richard E. Rorabaugh, *The Old Dominion and the New Nation, 1783-1800* (Lexington: University Press of Kentucky: 1972) 139-438. Klein and Mayensko, "Economy, Community, and Law" 487 note that there was no partisan support of trumpets in New York.

55 *Columbiana Advertiser and Commercial, Agricultural, and Agricultural Gazette*, September 27, 1802. Biographical information about the company leadership. T. Michael Miller, *Artisans and Merchants of Alexandria, Virginia, 1780-1820*, 2 Volumes (Bowie: MD: Heritage Books, 2001-2002), I: 181-182, 181-182, 247, 2: 51, 74, 189, and Halls "Origins of the West End" 86-87. Halls identifies Lewis Powell, Jr. as a director; however, the newspaper report of the meeting clearly identifies Powell, Sr.

56 Meeting of Directors: October 1, 1802. Little River Turnpike Company Record Book, 1801-1812: 7-9, LOR. Little River Turnpike Company Minutes, December 21, 1802, Alexandria Legislative Petitions, LOR.

57 *Shepherd Statistics at Large*: 2: 492-493

58 *Alexandria Daily Advertiser*, December 2, 1802; *Alexandria Express*, December 1, 1802. Jackson "Roads Must Be ruled," 222-226 tells of a similar conflict in Pennsylvania between the technical demands of the surveyors and the political concerns of the company.

59 "A Subscriber," *Alexandria Express*, September 5, 1803, and *Alexandria Advertiser and Commercial Intelligence*, October 3, 1803; see also, "Two Storms," *ibid.*, October 27, 1803, who made similar arguments in favor of the Castorville route.

60 "A Stockholder" (*ibid.*), October 20, 1803

61 *ibid.*, November 17, 1803

62 "Straight-Way" (*ibid.*), November 15 and 21, 1803, letters of Blake C. Dick and Peter Wise (*ibid.*, November 21, 1803; letter of James Keith, *ibid.*, December 2, 1803)

63 Letter of Charles Lee (*ibid.*, November 21, 1803; "An Alexandrian Stockholder" (*ibid.*, November 21, 1803; see also, "A Country Subscriber," *ibid.*, November 20, 1803; and letter of James Keith, *ibid.*, December 2, 1803)

84 "Straight-Way" (adj.), November 25, 1863; letter of Loren Powell, J.T. Ricketts and Charles Sumner (adj.), November 23, 1863; letter of Loren Powell, (adj.), November 23, 1863

85 (adj.) December 3, 1863. The shareholders elected Loren Powell president, and Charles Sumner (Alexandria attorney and merchant), J.T. Ricketts, Josiah Thompson (Alexandria merchant and banker), William Payne (Fairfax County surveyor and partner of the paces) and Charles Page (Alexandria bank cashier) directors. Biographical information: Miller, *Alexandria and Maryland*, 2: 121-122, 144-145; 25-35. On the route controversy see also, Hills, "Origins of West End," 50-55.

86 *Shepherd, Statistics of Loans*, 3: 450. *Alexandria Advertiser and Commercial Intelligence*, December 17, 1863, July 18, 1864, and October 24, 1865; Hills, "Origins of West End," 106-107.

87 *Alexandria Daily Advertiser*, December 30, 1864.

88 *Alexandria Advertiser and Commercial Intelligence*, December 31, 1863; *Alexandria Register*, June 24 and September 9, 1863; *Alexandria Daily Advertiser*, August 29 and December 30, 1864.

89 *Alexandria Advertiser and Commercial Intelligence*, September 30, 1863; *Alexandria Daily Advertiser*, August 24, 1864; Little River Turnpike Company, Record Book, 1863-1872: 22. LOV: *Alexandria Daily Advertiser*, March 5, 1865; *Shepherd, Statistics of Loans*, 3: 149-150. "I have been unable to locate a petition from the company requesting aid, but the proceeds of the act states that the directors solicited the legislature. In all, money flows from ten counties were appropriated for the shares: Fairfax, Loudoun, Frederick, Jefferson, Berkeley, Hampshire, Shenandoah, Rockingham, Pendleton and Hardy.

90 *Alexandria Daily Advertiser*, December 12, 1868; Little River Turnpike Company Record Book, 1861-1869: 35-37, 41-45. LOV: Hunter, "Turnpike Construction," 124, 129; Hills, "Origins of West End," 120-125.

91 "Statement of Master Peter Reed, by Little River Turnpike Company." Little River Turnpike Company, Accounts, 1864-1868. Internal Improvement Expenditures, Memoranda, 1355-1356, 1751, 1784-1785, 1367-1443, *Abstract of Public Accounts*, LOV; Little River Turnpike Company Petitions, December 16, 1864 (request for \$50 new shares), and December 15, 1865 (request for 150 new shares), *Alexandria Legislative Petitions*, LOV; Little River Turnpike Company Record Book, 1861-1869: 39-50, 54. LOV: Josiah Thompson (Treasurer, Little River Turnpike Company) to Bernard Payton (Secretary, Board of Public Works), November 28, 1857.

Little River Turnpike Company, *Correspondence, Reports, etc.*, 1805, 1814, 1817, 1818-1833, LCV. The company issued a total of 1,000 shares though only 1,008 according to Thompson, were subscribed.

75 Thompson to Peyton, November 20, 1817, Little River Turnpike Correspondence, Reports, etc., LCV. These figures compare favorably to the tolls collected on two of Pennsylvania's busiest turnpikes. Tolls on the Philadelphia Lancaster turnpike ranged from \$42,000 to over \$20,000 per year in its first seven years of operation (1790-1800). Over the next five years tolls even fell \$24,000 per year. Tolls on the Germantown and Portstown Turnpike Road which traveled north west of Philadelphia averaged \$10,000 over its first three years of operation; see Jackson, "Roads Most Traveled," 250-552. The Little River Turnpike became more profitable after 1830 when the manufacturing was fully completed. Rice, "Internal Improvements," 52. In 44 years that freights "ranged between four and six per cent in normal years." On the unprofitability of turnpikes in the early republic see Durrthorpe, *Turnpikes*, 113-115. Taylor, *The Transportation Revolution, 1790-1860*, and Katz and Margolis, "Economy, Community, and Law," 450-582.

76 Roberts, "Roads of Virginia," 98-99-100. Rice, "Internal Improvements," 50-53, 100-106. Korte's *Marine*, 57-58, 58-60. Hunter, "Turnpike Construction," 177-178, 196, 198. Hall, "Origins of West End," 184-186.

77 W. Freeman Gilpin, "The Grain Trade of Alexandria, Virginia 1800-1845," *North Carolina Historical Review*, 4 October 1937, 424-497, charts the volume of grain shipments after 1820. Flour exports in 1808, for example, totaled 48,820 barrels; in 1815 over 140,000 barrels were sold abroad. Grain exports amounted to almost 15,000 bushels in 1805, but peaked at just under 138,000 bushels in 1812, the same year the company completed the turnpike.

78 Hall, "Origins of West End," 187-188.

79 *Ibid.*, 189.

CHAPTER 5  
"A PRIORIOR SITUATION FOR A TOWN"  
URBAN GROWTH AND ECONOMIC DEVELOPMENT

The shift to commercial wheat farming in the upper northern neck of Virginia spurred the construction of better roads and attempts to clear the region's rivers. By the end of the first decade of the nineteenth century the produce of the lower Shenandoah Valley and Loudoun County poured into Alexandria via the Potomac River and the Little River Turnpike and from there was shipped to overseas markets. But the shift to wheat did more than prompt the development of new transportation facilities. Grain farming also connected profound changes in the economic infrastructure of the region. Unlike tobacco, wheat needed to be processed before it could be shipped to foreign markets. As a result, wheat production encouraged the development of numerous "satellite" industries: milling, baking, brewing, distilling—throughout the region. These industries congregated at favorable sites and gave rise to new urban centers. Indeed, in the years after the Revolution northern Virginia was the site of significant urban development, both in the growth of existing towns and in the appearance of over twenty new towns and villages. By 1800 the region possessed a highly developed pattern of urban growth, centered around the port of Alexandria and the

valley towns of Winchester and supported by dozens of lower-order urban places.<sup>1</sup>

Nonetheless, historians agree that from the earliest days of settlement the plantation South lacked urban centers. In the colonial Chesapeake the combination of climate and geography hindered town development and facilitated scattered settlement. The climate encouraged the production of tobacco which depleted the soil and prompted planters to require large tracts or move frequently to virgin lands. In addition, the rivers of the colony, navigable from Chesapeake Bay deep into the interior, enabled planters to trade directly with English vessels. The planter, in effect, merged the role of producer and merchant and had little need of staple collection points or commercial centers. In the face of these conditions legislative efforts to create towns largely failed. By the first decades of the eighteenth century, however, the growth of the tobacco trade led merchants to organize and concentrate it. Throughout the Chesapeake "tobacco towns" appeared, each with its own warehouse at which the tobacco was inspected, graded, and stored. Still, the distinctive geography of the Chesapeake restricted the economic reach of each of these towns to a small area, while the limited processing and marketing requirements of the staple generated little in the way of secondary industry. Tobacco towns experienced a quick spurt of growth when the trade was first centralized,



FIGURE 5-5. THE TOWNS OF NORTHERN VIRGINIA, 1776-1800

but gave little direction. As a result, "plantations and small villages were in most quarters the only groupings of population."<sup>4</sup>

Urban life in the antebellum South, many historians argue, was similarly stunted. Southern towns were few and small, and unlike the antebellum North there were "no great cities and few important towns." "Southern society as a whole," argues historian Elizabeth Fox-Genovese, "did not generate a city-system." The household production of Southern plantations inhibited local and regional markets, industrialization, and the development of a transportation and communication system linking another urban center to a dominant central place. Like tobacco, cotton, the antebellum South's primary staple, needed little processing. Consequently urban centers in the South served primarily as collection points for the staple. Southern villages and towns existed but rarely did they cross the threshold, defined as a population of 2,500, "to urban status." Nor did Southern towns feel like their northern counterparts. Historians argue that the economic and commercial vigor of booming northern towns was conspicuously absent in Southern urban centers. Instead, "the whole aspect" of Southern communities "was one of almost dreamy idleness." Tied to the plantation economy, the pace of life in Southern towns reflected the rhythms of staple agriculture. Towns "sleep" in the spring and summer and awake only in the late fall and winter with the arrival of the cotton crop.<sup>5</sup>

Unfortunately, this picture of a rural South with only limited urban growth does not describe the situation in the upper northern neck of Virginia in the years after the Revolution. Indeed, the number of urban places and the percentage of the population living in such centers rose significantly between 1790 and 1840. In 1790 only nine legally established towns existed in the region extending from Fairfax County to the lower valley, with an urban population of approximately 4,500, or 11 percent of the region's total population. Only Alexandria (2,000), Winchester (1,800), and Shepherdstown (2,000) were more than villages. In contrast, by 1790 there were fourteen unincorporated towns whose total population was close to 8,000. This figure represented some 14 percent of the four counties' total population of 56,715. Ten years later the region contained twenty-three unincorporated towns whose population was over 12,000 or 25 percent of the region's total population. By 1840 twenty-six unincorporated towns with a population of over 17,700 (or 28 percent of the total population) dotted the upper northern neck. The leading towns were still Alexandria and Winchester (2,500 and 2,000 inhabitants respectively) but other towns also grew rapidly. Both Leesburg in Loudoun County and Martinsburg in Berkeley had over 1,000 inhabitants by 1840, while Shepherdstown in newly created Jefferson County had some 1,100 residents (see Table 5.1 and Figure 5-5).



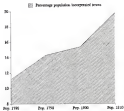


FIGURE 5-2 PERCENTAGE POP OF INCORPORATED TOWNS

Of course, according to the census definition of "urban" established by historian's population greater than 2,500—few of the incorporated towns and villages of northern Virginia can be recognized as urban places. Indeed, in 1810 the population of only five towns exceeded 1,000. Yet such definitions of urban fail to account for eighteenth and nineteenth-century observers who identified even small communities as urban ones. For them, a town seems to have consisted of more than a particular population threshold.<sup>4</sup> On occasion, historians have acknowledged that a census definition is "arbitrary and misleading." Such dissenters, they note, do not recognize the statistical economic functions performed by population centers which fail to reach a particular population threshold.<sup>5</sup> Yet only rarely have historians recognized the importance of towns and villages in the rural South, which through small, carried-out economic activities, vitally important to the surrounding countryside. Perhaps, then, a more accurate definition of urban can be found by looking at the economic functions performed by such population centers and to see how location and development are intimately related to the needs and requirements of the contiguous farming regions.<sup>6</sup>

Historical geographers were among the first to insist on the importance of economic function as the defining characteristic of urban. Central place theory argues that urban centers or central places appear whenever the population density of a region makes it economical for labor

specialization to occur at a centralized location. The surplus of commodities or services produced at the central place are then exchanged with the surrounding countryside. The precise location of a central place is dictated by the distance of the towns from other central places and the accessibility to the surrounding countryside (usually a function of distance or topography). Together these two factors determine the 'range' of a central place - or the size of the market area which supports it. However, since the value and transportation costs of different commodities vary, each central place will have its own range. The range of a central place is also determined by the number of economic functions carried on at that location: the larger the number of functions the greater the range. The result will be a hierarchy of central places, differentiated by the nature and number of economic functions offered by each. Finally, crucial to the creation of centrality is the entrepreneur - a profit-minded individual who perceives the opportunity presented by population growth and facilitates exchange between the central place and the rural economy. Central places, then, are 'service centres' producing profits and services to meet the needs of the outlying agricultural region.<sup>4</sup>

Such service centres appeared in the rural South after 1700 whenever significant *diversification* took place in the regional economy. Urban growth was most pronounced in those regions which began producing goods for export in response to rising demand in the West Indies and Europe.

Aggregated diversification generated a series of new subsidiary activities - or satellite industries which clustered, at geographically favorable sites and provided the economic base for a numerous towns and villages. The key determinant in the appearance of these new towns and villages was the extensive processing which required in order to make it a viable export crop. Unlike tobacco, the slight bulk and limited processing requirements of which generated few satellite industries, wheat could not be exported in western climates in an unprocessed state. To avoid spoilage from heat and humidity wheat had to be milled into flour or baked into chaparral or biscuits, and packed into barrels for transport to overseas markets. Thus, the urban places in grain-growing regions were required to develop a series of new functions to service the needs of the region's farmers. In addition, the greater bulk of wheat required more trips from the farm to the milling center or shipping port, and from the port to the foreign market. This, in turn, demanded that more resources be expended on improving the quantity and quality of transportation facilities both on land and at sea. In short, compared to tobacco, grain generated far more "forward linkages" - the economic activity required to move export staples from the site of production (the farm) to the final market destination - and these satellite activities rapidly clustered at a growing number of urban centers.<sup>2</sup>

In northern Virginia the first urban centers appeared in the 1740s and 1750s. Along the region's hierarchy of central places was Alexandria,

situated on the Patuxent below the fall line. The town was formally established in 1748 in response to the increasing population of the Patuxent and lower valley. Up to the Revolution, the town served primarily as a collection, inspection and transshipment point for the tobacco of the region. Like other tobacco inspection sites, the town expanded rapidly in its early years, growing to over 2,700 inhabitants in 1765. Fifteen years later, however, Alexandria's population was only marginally higher. This slow growth reflected the limited number of forward linkages generated by tobacco. Though warehouses and inspection facilities, tobacco merchants for distant ordinary keepers, and a small number of ship-building and construction trades emerged in Alexandria prior to 1775 there was little in the way of manufacturing or processing. In addition, business British merchants controlled the trade. The primary decisions and activities regarding marketing, shipping, and merchandising were made in Great Britain. Alexandria like many other tobacco towns, was only a shipping point in the larger Atlantic trade network. Tobacco flowed out of Alexandria, but economic development converged elsewhere.<sup>20</sup>

Still, Alexandria served additional functions for the region. From the early 1750s it was the administrative and judicial seat for Fairfax County, and an important retail center. In 1762 the county courthouse and jail were moved to the town, and some years later Christ Church, the Anglican chapel of Fairfax Parish, was built in Alexandria. In addition to

some annual fair was established in 1752, and over the years growing numbers of merchants selling manufactured goods from Great Britain and luxury items from the West Indies located in the town. By the early 1770s thirty-one merchants had set up shop in Alexandria.<sup>11</sup>

After Alexandria, the town of Winchester, located in Frederick County, was next in importance in the regional hierarchy of central places established by the Virginia assembly in 1788 as the site of the county seat and a semi-annual fair. Indeed Winchester's growth (it was enlarged in 1780) reflected the increasing population and agricultural production of the lower valley. The town's administrative functions ensured that county residents would have constant access to the town, but from an early date Winchester performed important economic services for the surrounding agricultural community. By the 1750s the farmers of the lower valley were producing an increasing percentage of their varied output—wheat, corn, rice, tobacco, cattle, and swine—for the market. Cattle from the lower valley were driven north via Winchester by the Great Wagon Road to Philadelphia. During the French and Indian War Winchester served as a staging post for the surplus grain. Some beef and pork shipped by Frederick County farmers to the colony's troops stationed at the West. And by the late 1750s better tobacco, horses, beef, and small amounts of wheat were transported to Alexandria from the lower valley. This trade centered on Winchester because it stood at the intersection of the three roads that extended to

Alexandria across the Blue Ridge and the Great Wagon Road running north and south. As a result, in 1756 the town contained two stores and six taverns and by the 1760s more than five towns merchants were buying surplus produce from the county's farmers in exchange for imported manufactured goods and provisions.<sup>15</sup>

The Virginia assembly established three other towns in the region in the 1750s. Colchester, created in 1758, lay south of Alexandria, on the north shore of the Occoquan River three miles above the Potomac. The town owed its existence to a ferry which crossed the river on the route of the King's Highway, the main north-south route through Tidewater Virginia. In addition, Ox Road (later known as Colchester Road) extended from the town to the Blue Ridge. Colchester served primarily as a collection point for local tobacco & merchandise was established in 1763 and limited amounts of flour and wheat. The town's Scottish border controlled the trade and marketed imported manufactured goods. However, the proximity of Alexandria limited Colchester's growth to only a few stores and taverns.<sup>16</sup>

The creation of Loudoun County in 1758 prompted the establishment of Leesburg. The town served as county seat and lay at the intersection of the east-west Ridge Road and the north-south Carolina Road. Despite this auspicious location, the town grew slowly before the Revolution. Like Colchester, Leesburg's proximity to Alexandria deprived it of many essential economic functions, and it remained primarily an administrative center.<sup>17</sup>

Also in 1734 the Virginia assembly established the town of Stephensburg in Frederick County. Though it lay on the Great Wagon Road to the south of Winchester, Stephensburg served only a small local population and grew little before the Revolution.<sup>12</sup>

Over the next fifteen years few new urban centers appeared in northern Virginia. In the 1760s only Martinsburg later changed to Shepherdstown, lying on the Potomac River in northern Frederick County was established by the Virginia assembly. The town owed its existence to the presence of a ferry across the river to Sharpsburg, Maryland established at the same in 1758. In addition, roads linked Shepherdstown to the Great Wagon Road to the west and across Veranda Gap to the Ridge Road to Alexandria. A semi-annual fair was established in 1761 and by 1770 the town's population was 700, growing to 2000 six years later.<sup>13</sup>

"Being pleasantly and commodiously situated for trade and commerce" certainly encouraged Shepherdstown's growth, but more important still was the increasing population density of the lower valley and the changing nature of agricultural production in the surrounding countryside. In 1765 Frederick County (which included Berkeley) had 8,072 inhabitants. Twenty years later the population of the lower valley was 22,000. This population expanded the need for urban service centers, particularly after the Revolution.<sup>14</sup> Equally important, by the late 1760s commercial wheat cultivation was becoming an increasingly significant

component of the lower valley's agricultural output as prices for the commodity rose in response to foreign demand. The Revolutionary War also encouraged wheat production. During the war the valley became an important source of foodstuffs and horses for the American military. In fact Robert Marshall has estimated that between 1790 and 1795 (with foreign markets largely closed to American producers) lower valley farmers produced nearly 1.5 million pounds of flour per year.<sup>10</sup>

The rise of commercial wheat farming had important consequences for wheat growth. Existing towns became centers for the collection and distribution of wheat, and for the milling of wheat into flour. In Shepherdstown, for example, Thomas Shepherd Jr. building machinery after whom the town was named, erected a merchant mill as early as 1775. He, like many others, was convinced that the town would "become the first place of business in the upper parts." Not only was Shepherdstown "supported by a most fertile country," but, contiguous to the town were "powerful streams" which afforded convenient mill seats for converting the grain of the surrounding countryside into flour. Most important, however, Shepherdstown was "convenient to the river trade." Located "half way between the Allegheny head mountains and the sea ports," the town's location, many believed, would enable it to regulate the produce of the back country that would run down a cleared Potomac. By the early nineteenth century Shepherdstown was home to 2,100 inhabitants, four "merchant

mills," two large saw mills, several "large manufactures of bottles [and] distillers," "artificers and mechanics of every denomination," and "several well stocked and large stores." If not the grand enterprise measured by its location, the town had become an important local service center for the surrounding farm community.<sup>11</sup>

Shepherdstown reveals the way in which new industries proliferated in response to the region's changing agricultural output. Other towns throughout the lower valley experienced similar economic development, and new towns began appearing with increasing regularity. Urban growth was encouraged by the fact that the region was endowed with "a great variety of streams" suitable for mill sites. Indeed, by 1787 the increase in the numbers of grist mills west of the Blue Ridge had caught the attention of Alexander's merchant-millers. Concerned that the proliferation of mills would lead to a decline in the quality of the valley's flour, they petitioned the Virginia assembly asking that a more effective flour inspection system be established. If designed to facilitate western millers, however, the measure was futile. Mills kept rising and by the last decade of the nineteenth century one contemporary estimated that there were over 160 flour mills in the lower valley.<sup>12</sup>

Martinsburg provides a good example of wheat-induced urban growth. After the creation of Berkeley County in 1773 Martinsburg was chosen as the county seat, though the spot was at that time "high Woods." Yet within

those years the town had over thirty houses and close to 200 inhabitants. Rapid growth continued and in 1777 the inhabitants petitioned the legislature to incorporate the town, which was accomplished the following year. Martinsburg's administrative role contributed to its rapid development, as did its location at the crossroads of the Great Wagon Trail and roads to Shepherdstown and Barbours, the site of a popular mineral spring. Yet as the town inhabitants noted in their petition requesting incorporation the primary basis of future development was the town's location: "in the midst of rich and well settled Country."<sup>20</sup>

Martinsburg soon functioned as a collection point and market for area produce, a retail outlet for imported manufactured goods, and a provider of services and trades to the town's hinterland. As the seating of town residents the Virginia legislature established a market and regular fair in Martinsburg in 1783, thereby strengthening the town's role as a local market for area produce.<sup>21</sup> In addition, a small river, the Tomsboro, flowed through the town and furnished a number of leverable mill races. By the mid-1790s at least six modest mills were erected in town enabling it to offer processing facilities for area farmers.<sup>22</sup> The mills, in turn, encouraged additional economic activity. Crops were harvested in barrels in which flour was transported; wagons transported the grain to mill or market, and wheelwrights and wagon makers found work building and repairing all manner of conveyances.<sup>23</sup> Grains could also be converted into liquor, and by

the 1790s several families are in Martinsburg their home. The families moreover, relied upon the town's pigs and pump making and copper and tin smiths to help build and maintain their mills.<sup>17</sup> In addition, increased grain production enabled farmers to expand their livestock holdings. The cattle sold at the Martinsburg fair supplied the raw material for leather workers including two tanners and a shoemaking firm that settled in Martinsburg in the 1790s.<sup>18</sup>

Finally, the increasing wealth of Martinsburg encouraged craftsmen, in luxury crafts to settle in the town. A painter,<sup>19</sup> three clock and watchmakers, a painter and upholsterer, a shoemaker, three tailors, a harness maker, a fuller and dyer, and five druggists all took up residence in Martinsburg in the 1800s.<sup>20</sup> By the early nineteenth century the town had grown to over 1,800 residents, and boasted eight taverns (at least two of which were owned and operated by women), eight large mercantile operations, and "every description of artificers and mechanics."<sup>21</sup>

More notable still was the tone of economic life in Martinsburg. No sleepy Southern community was this. Indeed, the rapid development of the town prompted Philip Vickers Folsom to pronounce in 1775 that "if American Liberty be established," it and the "other select Villages" of the valley "in a Series of Years will be populous & wealthy Towns ground in Agriculture, & busy with Commerce." The merchants and mechanics of Martinsburg clearly relied on town business, striving to improve the town

and increase its economic influence. The desire for incorporation in 1777, for example, proceeded from the belief that the town had "the prospect of . . . being a considerable place" if "Established by Law". Similarly, supporters of the market house agreed that regular fairs "would be advantageous to the said Town & nearby about it". To raise the £200 necessary to construct the building, town residents John Slieren and Moses Collins organized a lottery in July 1760. The effort had widespread support: for by November the pair had sold the 600 available tickets and had collected enough money to construct the building.<sup>10</sup>

Town residents just as enthusiastically competed against each other in the local marketplace. When a tradesman or professional advertised his business in the local newspaper, rival tradesmen frequently felt compelled to place counter advertisements. For example, when clock and watchmaker William and Philip Young announced they had opened a new shop in town and would complete all work "with neatness, on moderate terms, and with despatch [sic]" established tradesman Daniel Buckles immediately countered with his own pitch, reminding customers that he continued to "repair Clocks and Watches in the best manner, on the most reasonable terms, and with the greatest expedition." Buckles appears to have been particularly competitive, with four local practitioners advertising their services in early 1766.<sup>11</sup>

Mill were conspicuous was the public competition between The Mountbarns milling firm of William Boyd and Company, and Frederick Lever and Alexander Cameron. Boyd and his sometime partner Henry Lever announced in August 1798 that they had commenced operations and could "make as much, if not more fine clean Wheat, than any other mill in Berkshire," adding that both had "been bred to it, and served an apprenticeship at the Dreadnought Mill" in Philadelphia. Fearing that a new firm with Pennsylvania references would hurt their existing business, Lever and Cameron replied a week later by noting that they too "had been bred to [the business] . . . and served an apprenticeship," though "not at Berkshire." Their "knowledge" of milling, Lever and Cameron declared enabled them to "make as much and as good Flour from Wheat as any Mill in the neighbourhood" and they backed their claim by promising to "stand the inspection of all genuine Flour made at the Mill." Boyd responded by offering his own goods to prospective customers: farmers would be supplied with barrels for their flour until it was sold, all customers' wheat would be kept separate, and Boyd promised to attend personally to all milling. Finally, he again affirmed the quality of his work, reassuring his customers that in the last batch of flour sold by the mill "we had not above five or six hundred pounds out of five hundred." Bidding for a share of the local market, both these firms appear to have more in common with the

"Yankee" merchants disparaged by Southerners than with the diffident Southern businessmen described by historian.<sup>10</sup>

Nonetheless, the industrial development and entrepreneurial spirit found in Martinsburg was commonplace in northern Virginia after the Revolution.<sup>11</sup> Just as Vaekem had predicted, new towns appeared throughout the lower valley after the establishment of American independence, as enterprising land owners sought to capitalize on the opportunities presented by an expanding population and a booming wheat economy. Two years before Martinsburg was incorporated, the inhabitants of Beth (or Warm Springs) requested the Virginia legislature legally establish their town. The petitioners noted that each year hundreds of people visited the springs, the waters of which were believed to cure rheumatism and a variety of other ailments. However, the town lacked lodging "for the Reception of Company" and the present owner of the land, Lord Thomas Fairfax, refused "to erect proper buildings" or "grant the property . . . to such persons as were desirous of building thereon." If fifty acres of land were laid off for a town, the petitioners estimated, its owners could build appropriate accommodations and the springs would attract a "great concourse of people from all parts of America." The legislature responded by creating the town without the permission of Fairfax and the town soon became a popular health resort among "the best people" of Virginia society. By the early nineteenth century over 100 inhabitants, five

boarding houses and several merchants served upwards of 1000 visitors each year.<sup>56</sup>

New towns appeared with increasing regularity after 1793. Between 1790 and 1800 eight towns were incorporated in the lower valley. Charlestown, in Berkeley County (and after 1800 the county seat of Jefferson County), was established by Charles Washington, brother of George, at the request of "many Persons of Credit who are desirous to encourage industrious persons . . . by forming a Town." Lying east of the Great Wagon Road, the town became a locally important service center for the surrounding farming community. In 1830 Charlestown housed over 700 inhabitants, a merchant mill and "many . . . mechanics, who carry on all sorts of trades and manufactures."<sup>57</sup> The following year David Gerrard petitioned the Virginia legislature to create Gerrardstown for "Milltown" situated in southern Berkeley County on "a very publick [sic] road leading from the Western country to . . . Alexandria." Gerrard believed the town would be a "thriving place," able to capture a "share of the western trade" and of "great Utility" to area farmers. By 1818 Gerrardstown was home to forty families, several merchants and a "number of mechanics" who labored "for the supply of business" in the vicinity.<sup>58</sup>

Antislavery individuals such as Gerrard effected the creation of the remaining post-revolutionary lower valley urban places. Frost Royal, located in south-east Frederick County on the road from Chester's Gap, was

incorporated in 1588 when frontier landowners requested that a town be laid out on fifty acres of their property. The petitioners expected that incorporation would be "of Petrick [and] utility" and would encourage "the different Mechanicks [sic] and Manufacturers to settle" there. By the early seventeenth century Front Royal was home to 400 people, "several valuable merchant and great miller" and "skillful mechanics." In 1704 Darksville, located in northern Berkeley at the junction of the Great Wagon Road and Middle Creek, was incorporated at the request of forty nine "subscribers" who had purchased lots of town founder James Darkin. The town's location on the main thoroughfare through the valley and "in a very fertile and populous part" of Berkeley contained three individuals of Darkinville's potential growth. Middletown, located in southern Frederick County on the Great Wagon Road and incorporated in 1704, was located on sixty acres of land owned by Peter Senneby.<sup>17</sup>

By 1620 the Virginia legislature had incorporated three more towns in the lower valley. In 1780 Baccerville, located in north east Frederick County on the road between Winchester and Snicker's Gap, was legally established on twenty acres of land owned by Benjamin Berry and Sarah Stedding. Though located on the Opequon Creek, the town had few industrial enterprises, functioning primarily as a retail outlet for area farmers and an educational center. In the same year John and William Smith, along with 114 other individuals petitioned the legislature to create

a town on fifty acres owned by the State in southern Berkeley (later Jefferson) County. Called Southfield, the town grew to over 300 inhabitants within a decade and functioned as a local manufacturing center. A distillery, four blacksmiths, five weavers, a wagonmaker, a saddler, a hatter, a tanner, three tailors and three blacksmiths resided in the town in 1818. Finally, in 1780 Stephen Pritchard and Adam Kenna petitioned for the legal establishment of Kenna town in their property in central Piedmont County. Though incorporated in early 1808 the village designated, probably because of its proximity to Winchester.<sup>21</sup>

Indeed, Winchester dominated the developing urban system of the lower valley, particularly after the Revolution when it expanded rapidly from 1,000 inhabitants in 1780 to over 3,000 thirty years later. The sources of growth were at least three-fold. As the administrative and legal center of a large and densely populated county, Winchester continued to benefit from the sizable number of non-residents who regularly visited the town on court days, patronizing lawyers, taverns, and retail merchants. Consequently, by late 1790s the town was home to over twenty lawyers, twelve taverns, and thirty stores.<sup>22</sup>

In addition, Winchester's position at the crossroads of a number of thoroughfares running east-west and north-south continued to fuel its growth. Prior to the Revolution Winchester was an important supply point for migrants traveling south to the Carolinas, as the post-revolutionary

period the town functioned as a similar station for travelers headed west to the Ohio country. While newspapers and visitors to the valley reported amazement at the number of wagons who passed through the town on their way west, Winchester's merchants actively courted the business of the travelers. As a result, wagons such as Harry Holmes used Winchester as a staging point, purchasing necessary supplies and transportation in the town. Once settled in Kentucky and Tennessee, moreover, many wagons shipped their agricultural produce back east through Winchester. Merchants in western Virginia and Kentucky, for example, berthed cattle in the town. Merchants in Winchester also received landed amounts of hemp, tobacco and flour from western settlers.<sup>10</sup>

More important, the role of supplies to western wagons and the growing population and agricultural diversification of the lower valley helped the development of an expansive array of manufacturing in Winchester. Indeed, contemporaries such as *Frank Cass* considered manufacturing the primary catalyst of the town's growth. For example, though there was no steady stream within town limits, "numerous" grist mills appeared on nearby creeks and rivers and provided constant employment for coopers, and for wagons who transported "flour to Alexandria" at the rate of \$4.25 per barrel. Within the town itself at least three distilleries, four tanneries, twelve sawmills, eight shoemakers, and a number of bakeries, harness manufacturers, wheelwrights, blacksmiths, and

metal workers had established operations by the mid-1780s. And as the wealth of the region grew the towns attracted an increasing number and diversity of tradesmen. Butlers, tailors, and weavers proliferated, and smaller numbers of painters, carpenters, bakers and dyers, potters, candlemakers, silversmiths, goldsmiths, and watch and clockmakers settled in the towns. In the 1780s two large manufacturing operations were also established in Winchester: a hemp factory producing rope and linen, and a nail factory. Cane, for one, praised these "precious manufactures" but emphasized that they "resulted from a flourishing agriculture." Specifically, grain production "tripped off a sequence of linked urban activities, initially focused on transport, provision, and repair," but soon generating "diversified manufacturing."<sup>14</sup>

It is particularly notable that many of Winchester's inhabitants welcomed and celebrated the town's growing economic development. Like Cane and other national spokesmen for industrial growth, the town's manufacturing advocates argued that such enterprises would benefit the entire community and contribute to the national welfare. In 1788 for example, "A Thinker" celebrated the "spiritualness" of Winchester's population, and argued that the recently established "BROOM and FLAX and NAIL MANUFACTURES" were "two of the most capital studies that have ever been struck since the foundation of the town." These trades, and the "ardent application to industry" they represented, would lead to "greater" the

all inhabitants. A month later "A MAILER, [sic] adopted a national perspective. He argued it would be of monstrous value to the country and its balance of trade if "each individual" would purchase "home manufactures in preference to those of foreign countries" particularly domestic manufactured goods. Another correspondent noted that it gave "him singular pleasure to find the inhabitants of Winchester so unanimously employed . . . promoting home manufactures." The report's support of the Constitution was also related, at least in part, to the desire to encourage manufacturing. As one local writer contended, the "general duties and requests" of the federal government would enable American manufacturers "to supply our home consumption" and in time, perhaps, "foreign markets."<sup>40</sup>

East of the Blue Ridge, a similar pattern of urban growth and economic development occurred after the Revolution centered around the flourishing port town of Alexandria. Between 1780 and 1800 the population of the town increased from 2,000 to over 7,000 (a 35.1 percent rise or almost 9 percent per year), and by the 1790s Alexandria had established itself as the primary port on the Potomac. A key factor in the town's rapid rise was the aggressive boosterism of the town's principal inhabitants. This took two forms. First, Alexandria's leaders worked hard to improve the town's legal status. In 1776, for example, they requested the town's incorporation, arguing that a government distant from Fairfax County would be more responsive to the needs of Alexandria's inhabitants. The resulting town,

government created by the Virginia assembly in 1562 was controlled by local merchants and tradesmen who took measures to bootstrap and regulate the town's economic life. By the 1750s the town council had created a market house, regulated weights and measures and the issue of bread, collected duties from ships using the town's wharf, and had extended the town's major thoroughfares and boundaries. An equally important legal change occurred in 1778 when the Assembly, at the request of the town's merchants, named Alexandria one of the state's official ports of entry. The creation of a naval office ensured that exports and imports had to flow through the port. Alexandria's merchants also actively campaigned against high state import duties imposed during the war and in the 1780s. Virginia taxes, the town's merchants explained, "were higher than those in Maryland." The result was a "declension of the Trade of South Potomack" as farmers purchased imported goods in Georgetown and Baltimore.<sup>40</sup>

More aggressive still, was the campaign conducted by town leaders to bring the national capital to the Potomac. Many of Alexandria's merchants believed the town would furnish the ideal site for the permanent seat of Congress. While the political battle raged in Congress in 1790, the local press extolled Alexandria's advantages. In May Samuel Hanson, the town's printer, published the portion of Mason's *Geography* describing the Potomac River. The "Correspondent" who forwarded the concept noted that his

primary interest was to "have some influence on the determination" of the question of "a proper place for the permanent residence of Congress."<sup>47</sup>

However, convincing local residents of the report's suitability for the national capital could successfully battle against a manipulative campaign of national scope, particularly to overcome the challenge of other Polonian locations. In September 1789 the *Virginia Gazette* reported that Daniel Carroll – Maryland representative, had presented "a memorial from the inhabitants of George Town" to Congress: the petitioners expressed their willingness to be placed under congressional authority if Georgetown was made the permanent seat of government. Moreover, in early December the Virginia House of Delegates passed an act which ceded two acres of land "on the banks of the river Potomack above tide water" for the site of the national government.<sup>48</sup> If Alexandria, below the falls, was to remain a serious candidate the town's leaders needed to act. In early December, in conjunction with five Georgetown merchants five of the town's leading men issued a broadside arguing forcefully for a Polonian television site. Hoping for the widest possible dissemination, the authors of the tract forwarded it to the northern states. In early 1790 their efforts were rewarded, when Massachusetts, New York and Baltimore newspapers reprinted the broadside. Copies were also sent to the governor of Virginia, Benjamin Harrison, and the Virginia congressional delegation.<sup>49</sup>

The authors of the broadside employed four primary arguments:

First, they argued that the "river Potomack" lay "nearer the center of the Union, than any other considerable river." Second, it was "more advantageously situated for preserving an intercourse with the inhabitants of the Western territory." This was a significant consideration, given the youth and fragility of the nation. In order to stress this point the broadside contained an extended passage describing the extensive "inland" navigation to which the Potomac connected. The text also lauded the particular advantages of the upon adjacent to and west of Alexandria and Georgetown. The writers described effusively the "fertility of soil and salubrity of air" as the surrounding countryside; the abundance of natural resources such as stone, iron and coal; the extreme healthfulness of the situation; and the rivers defensibility. The hypochondria of the regional boosters led one northerner to comment wryly that Virginia "seemed to think the banks of the Potomack a Paradise, and that over a September"<sup>102</sup>

The writers of the broadside employed one final argument: they appended directly to the indictment of New Englanders. "Upon the Potomack," they noted, there "are but few merchants of large capital, and but very little shipping." Consequently, "the merchants of the eastward would have a better chance of clearing the trade of the metropolis," than if the seat of government was placed elsewhere. If the new capital was situated on the Susquehanna or Delaware, the "merchants of large

capital" who worked in the "comparatively long established towns of Baltimore and Philadelphia" would represent "the whole commerce" of those cities, leaving out New England traders. In essence, the broadside argued that the concentration of Polonian restricted to single crops would allow other parts of the Union to absorb some of the region's trade. That the tract failed to mention efforts of local merchants to foster the commercial resources of the region—and thus claim for themselves the profits—should come as no surprise, but in an age in which arguments were generally couched in a language which emphasized the common good, such a blatant appeal to self-interest is surprising and revealing.<sup>40</sup>

It is unlikely, however, that the tract greatly influenced the final decision. The passage of the Residence Act in July 1790 involved a delicate political compromise between the North and South in which James Madison agreed to support Alexander Hamilton's plan for the federal assumption of state debts in return for the capital. Still, two of the key votes in Hamilton's victory were provided by northern Virginia representatives, Richard Henry Lee and Alexander White. Both men, whose districts bordered on the Potomac, could promise their constituents something tangible in return for support of assumption. Once passed, the Residence Act left the choice of the specific location of the capital to the President. Since Washington had been known to favor the tidewater side from the outset, and had played a role in the production of the tract, his final

decision is not surprising. Indeed, ten days before the Act's final approval, Lee informed his brother Theodorick that "Georgetown . . . should be the destined spot" and that Alexandria will be selected "into the ten mile square."<sup>10</sup>

Alexandria's location in the District of Columbia heartened some residents, but it had only secondary consequences for the town's growth. A more important form of boosterism was the town merchants' campaign to encourage lower-valley farmers to look to Alexandria as the primary destination for their produce. Frictional shippers have outlined the proposed efforts to improve transportation facilities, but equally important were the entreaties of individual merchants to capture the trade of the hinterland. Indeed, Alexandria's growth was a direct result of the economic development of the upper northern neck and the aggressive efforts of the town's merchants to capture the regional trade. Prior to the Revolution much of lower valley's agricultural output had been shipped north to Philadelphia, but after the war Alexandria usurped most of the region's exports. Geographic proximity certainly helped the town, but the merchants' community's active pursuit of the valley's trade played a crucial role. By 1780 even Alexandria firms regularly placed advertisements in *Washington's* weekly newspaper, touting the variety, quality and responsiveness of their wares and the variety of products they would accept in payment. Over time, moreover, the volume of advertisements

plied by Alexandria's merchants increased as did the specificity of their appeals. Of the twenty adverts that appeared in a 1790 issue, for example, five were placed by Alexandria firms (and one by a Georgetown merchant). The products and services offered ranged from luxury items, knives, and provisions, to storage space for flour and wheat. In 1797 Alexandria produce prices began to appear regularly in *Washington's public prints* and the following year the *Magnum Centinel* published the weekly arrivals and departures at the Potomac port. Finally in May 1781 a weekly postal delivery between Alexandria and Winchester was started thereby making communication easier for "the mercantile part" of both communities.<sup>80</sup>

Alexandria's market penetration appears to have been even greater in Berkeley County. Beginning in the early 1790s the town's largest merchant firms regularly advertised in the *Marxanburg and Shepherdsboro* newspapers. Most numerous were adverts placed by flour merchants who promised to store local farmers' flour cheaply (generally six pence per barrel). Indeed one merchant, Robert T. Hays, pledged to store flour at no charge if sold to him. By the mid-1790s Alexandria's control of the lower valley's flour trade was so extensive that at least one Berkeley merchant, Thomas Peterson, opted to relocate to Alexandria in order to open a flour warehouse, and local merchants advertised their ability to store flour for easy transport to the Potomac port. Regularly telling the *Marxanburg* paper regularly detailed market conditions in Alexandria. In June 1796, for

example, a corresponding worried local farmers of the "harmless quantities" of flour "at present on hand" at the post and that a fall in price was certain. Less complete was Alexandria's control of the lower valley's retail market. A few Alexandria merchants regularly promoted a variety of imported and manufactured merchandise, but they faced stiff competition from local retailers who secured their merchandise from Philadelphia or Baltimore. The merchants of these towns, noted one traveler, gave lower-valley merchants larger credit, undercut Alexandria prices, and had a better selection of goods.<sup>14</sup>

Alexandria's control of the flour trade of northern Virginia not only led to a growing population, but also spawned an increasingly diverse occupational structure in the town. Most contemporaries considered Alexandria's wealth to lie in its commercial economy, and Ouse even asserted that Winchester, "because it manufactures more," "would appear to be" more "vigorous and flourishing" than commercially based Alexandria. In 1780 Ouse's observations may very well have been correct. Indeed, one scholar has found that only 35 percent of the heads of households were active in that year.<sup>15</sup> Yet the town's occupational composition changed as the economy of northern Virginia matured. By 1840 approximately 35 percent of the taxable in Alexandria were employed in manufacturing of some description, while a rather 52 percent of the taxable population worked in commercial occupations. In addition, 35 percent worked in unskilled

labourers and 8 percent were professionals. Of the 504 mechanics in 1808, the majority worked in the construction (114) and clothing trades (nearly seven). These notable, substantial numbers were employed in the leather trade (nearly two), transportation trades (nearly eight, ranging from wheelwrights to ship carpenters), and food industries (nearly four, of which fifty five were bakers, brewers and distillers). Thus, almost half of Alexandria's manufacturing population made their living transporting and processing the grains and livestock produced by northern Virginia's farmers. Little wonder the town's mechanics offered a unity of interests between manufacturers and farmers.<sup>22</sup> (See Figures 5-1 and 5-2)

To the west, Leesburg also experienced significant growth after the Revolution. The principal town of Loudoun County and the site of the county court and jail, Leesburg continued to benefit from its administrative functions, attracting large crowds at every session of the county court. In addition, the town's location along halfway between Alexandria and Winchester on the Ridge Road guaranteed a steady traffic of engineers and travellers. In response by the 1790s at least four tavernkeepers and eight merchants had established businesses in town. Other signs of the town's growing population were the steps taken by town leaders to improve local government. In 1787 they asked the legislature to appoint trustees empowered to oversee the management of the town. However, an application system of government was soon found to be inadequate to the

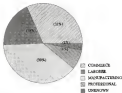


FIGURE 5-8. *ALIPISTOLIA COCCOLITHOPHORE* LARVA

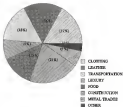


FIGURE 1-4 ALEXANDRIA MANUFACTURING OCCUPATIONS 1898

demands of a growing urban center and responsive to the needs of its inhabitants. Thus, in 1785 forty-seven residents requested that the state establish an elected town government. The legislature responded favorably, and also enhanced the powers of the trustees, authorizing them to repair and open streets, establish by-laws for the "good government" of the town, and levy taxes on the town's inhabitants. Under this government the town thrived: in 1788 the town supported a weekly newspaper and a local *sanitary*.<sup>121</sup>

More notable in the early nineteenth century is significant amount of manufacturing developed in the town – all serving the needs of the surrounding rural population. According to one local historian, by 1810 the town possessed a "flourishing industrial and commercial life."<sup>122</sup> The only surviving issue of Leeburg's local newspaper from this period, for example, includes advertisements of two shoemakers, a tinker, and a chair and wheel maker. The construction of a market house also strengthened the town's role as a local service center for area farmers. Not surprisingly, Leeburg's population increased as its economic functions multiplied. From a mere 300 residents in 1788, the town grew to over 400 by 1800 and close to 1,000 in 1820. As one quoniam reported of Leeburg in 1848, "population rising."<sup>123</sup>

The growth of the flour trade also generated a series of smaller urban centers east of the Blue Ridge. Indeed, between 1777 and 1806 nine towns were incorporated in Loudoun and Fairfax counties. As in the lower valley

the farmers of Loudoun and Fairfax gave over larger amounts of ground after the Revolution, and the state sponsored the varied grain-riddled processing facilities at favorable geographic locations.<sup>22</sup> Yet there was nothing spontaneous about these developments: they depended on the endeavors of commercially-oriented individuals – entrepreneurs who acted, as Thomas Burton's towns – as 'agents of connectivity'.<sup>23</sup> The post-revolutionary towns of Loudoun and Fairfax counties were a result of the deliberate efforts of 'proprietors' who saw the opportunities offered by independence and the new grain-based economy and attempted, not always successfully, to seize them.<sup>24</sup>

Some efforts at town revision began even before the Revolution. After the Virginia legislature's passage in 1772 of the original act to clear the Potomac Philip Ludwell Lee, a wealthy northern rock planter, laid off 200 acres of land 'adjacent' – the hills of the Potomack! – into a town to be called Phlox. Lee hoped the town would become an important transfer point for produce shipped down a cleared Potomac, but his plan came to nothing when the Maryland legislature failed to pass a companion act authorizing the river navigation. Phlox, then, was a 'paper town,' a failed entrepreneurial speculation.<sup>25</sup>

But the dream of a trading town at the Great Falls did not die (Philip Ludwell's son-in-law, Harry Light Horse Lee – considering the role fall of potential after the creation of the Potomac Company in 1784 – purchased

500 acres of land at the falls in 1788. The Potomac Company planned to build a canal around the Great Falls, and Lee believed the site would become an important transportation and commercial hub for boats coming down the river. But Lee's plans were more grandiose than this. He envisioned "a manufacturing town" at the falls. The canal, he proposed, would be used to power "every species of water works," most notably flour and saw mills. "The object is great," he intoned to James Madison, "very great indeed." Madison declined to invest in the enterprise, but Lee remained enthusiastic. In October 1790 he helped organize a petition to the Virginia legislature requesting the creation of the town at the Great Falls. Two months later the state incorporated the town of Marshallville.<sup>18</sup>

Unfortunately, Lee faced a series of legal and financial complications involving the land which delayed the sale of town lots until 1795. The land he purchased belonged to the Fairfax proprietary and in addition to the purchase price of \$1,500 Lee was required to pay annual quitrents amounting to \$1,000 before he could begin developing the site. Negotiations between Lee and the Potomac Company over the relinquishment of land for the canal further hampered his plans. Not until 1793 did the company agree to ceded Lee water rights as covers for the appropriated land, and it was less in the same year before Lee retired his debt to Fairfax. These delays undermined the project. In 1796 Lee courted investors in the North and Europe and had turned away "many applications . . . for lots" from "the

commercial people – on both sides of the Potomac. When public auctions of town lots were finally announced, however, the Potomac Company's slow progress clearing the river dampened the enthusiasm of many prospective buyers.<sup>120</sup>

In fact, at least three auctions appear to have taken place. As early as May 1790 the town's trustees announced the sale of lots, but a poor response led them to postpone a repeat of the sale "without doubt" in September. Yet another auction took place in July 1790, but many lots remained unsold. The public's indifference prompted Lee to petition the legislature in 1790 for the creation of a turnpike company to build a road between the fledgling town and Alexandria. He believed that an overland link to the port city would ensure McMillen's survival and the Potomac Company completed the road. The legislature responded favorably and shares of the McMillen Company went on sale in February 1790, but the turnpike's promoters never sold enough stock to begin operation.<sup>121</sup> As a result, McMillen languished. Deprived from the requisite major thoroughfare, and with canal construction proceeding at a glacial pace, the town attracted only a limited number of investors. Town trustees appear to have sold over sixty of the eighty-four half-acre platted town lots, along with a quantity of unplatted lands contiguous to the town, but the total number of land owners in 1797 amounted to no more than ten and most were closely associated with the Potomac Company.<sup>122</sup>

Still, some economic development took place at the site, though all of it was dependent on the canal. Indeed, even before the creation of Montpelier, the Potomac Company used the Great Falls as its field headquarters, constructing temporary barracks for the company's laborers and storage sheds for supplies. By the late 1790s the company had erected a number of more permanent structures on the site, including seven small buildings for the storage of supplies and the accommodation of "blacksmiths [and] employed in the Company's service," a warehouse, a large brick "Company House" for the captain, a millmill, and "a number of Huts for Laborers." In 1798 the company permitted Jane Myers, the widow of Christopher Myers, the company's engineer, to operate a tavern out of the company house. Myers opened her establishment in September and it remained in operation for some years.<sup>40</sup> And the company was not alone in building at the site. Lear noted in 1793 that Fowler had persuaded him to build a warehouse for the reception of flour, and John Potts erected an iron forge on his land as early as 1795. When Potts sold his property in 1798 the site contained (in addition to the forge) "a good wood house, iron house, and wood shop," a "black, workmen's houses" and a large dwelling house.<sup>41</sup> Lear also conducted a portion of his flour trade out of Montpelier. In 1799 he announced that he had established a flour warehouse "at the GREAT FALLS" where the "accommodations" were "attended by some on the river Potomack."<sup>42</sup>

All these enterprises brought Middleville some recognition. In 1797, for example, Jedediah Morse noted the existence of the "village" at the Great Falls. However, he failed to explain that the town's economy depended entirely on the success of the Potomac Company, particularly after the attempt to build the turnpike to Alexandria collapsed. While the company constructed the canal, Middleville thrived with energy. After the canal was completed, however, the sporadic access of navigators on the Potomac robbed the town of a stable economic base and population. Only when the river was navigable—approximately three months each year—did Middleville spring to life. The rest of the year the place lacked a viable economic function. Little wonder, then, that visitors were singularly unimpressed. John Davis described "a few scattered buildings" as the "hamlet," while Monmouth Courier noted that "wretched village" at the place. When the Potomac Company ceased operations in the late 1810s Middleville's fate was sealed. By 1822 the village was completely abandoned.<sup>10</sup>

Two other speculative town-building efforts failed even to get off the ground. In 1776 Thomas Ludwell Lee announced his intention to petition the state legislature in the coming term to incorporate a town on his land on Goose Creek. However, no petition survives and the Virginia Assembly never took any action to create such a town. Four years later thirty-four individuals, noting the "Utility of Towns . . . for Travellers" and

"Blighting Cisterns," requested the incorporation of Springfield in southeastern Loudoun County on twenty-five acres belonging to Charles Lewis, Robert Carter, and Stephen Beard. The legislature complied in early 1800 but the town never appears to have been laid out. Springfield existed only on paper.<sup>27</sup>

Though these speculations failed, other town promoters had greater success. Levin Powell, a wealthy Loudoun County planter and leading Federalist politician, established the town of Middleburg in 1781. Powell had long resided in Loudoun, having purchased 500 acres in the south central portion of the county in 1766. In 1781 he laid off into half-acre lots into a fifty-acre portion of his land lying at the intersection of the Culpester Road and the north-south route between Loudoun and Warrenton, Fauquier County. Within a few months Powell had managed to sell at least some of the lots to "adventurers" from Pennsylvania who believed "the situation of the place here fit to become a respectable Village." In order to encourage further settlement at the site the landowners, joined by Powell, petitioned the Virginia legislature in 1781 for the town's incorporation. The Assembly responded favorably and incorporated the village the same year.<sup>28</sup>

Middleburg soon became a thriving mercantile center for local farmers and travelers. The creation of the District of Columbia in 1791, Powell noted, had "a considerable influence on the value of property" in the village and over the next fifteen years he situated at least eleven more lot buyers

(an addition to the original name). By 1800 Middleburg possessed a tavern, a blacksmith, and a flour mill owned and operated by Powell. Over the next few decades the town prospered, its growth fueled by its location on a major thoroughfare midway between Winchester and Alexandria and the wheat and flour production of Loudoun County. It is noted Joseph Martin in 1816, "a growing and prosperous village" home to 400 inhabitants and surrounded by land that produced "on the average some about 25 bushels of superior wheat." If not a metropolis on the order of Alexandria, Powell's entrepreneurial efforts had helped to create a second-order central place.<sup>100</sup>

Two other villages, similar in size and function to Middleburg, appeared in Loudoun County after 1800. In 1800 long-time residents of Weinberg petitioned the state assembly that their village be "established as a Town." The legislature complied and 1801 Weinberg, located in northwestern Loudoun, was incorporated. Situated in "excellent wheat and corn land" the town functioned as a service center for local farmers, providing employment for a blacksmith, two mills, a bakery, a tannery, two gristmills, and a tavern. However, the town lay off the main thoroughfare between Loudoun and Potomac City, and required few additional functions and limited subsequent growth. Further west, at the foot of the Blue Ridge on the road to Potomac City, lay the community of Edgemoor. In 1803 twenty-three residents asked the state to incorporate the town. The petitioners noted that they had "purchased Lots [sic] of

Grand, but at a very considerable expense imposed them," and hoped to preserve their investment by installing a formal town government. The legislature complied and incorporated the town in 1832, but Hallowborough, like Waterville, seems to have never become more than a local service center.<sup>42</sup>

In Franklin County the presence of Alexandria tended to impede urban growth, particularly of other centers such as Colchester. By the mid 1780s just over 200 people lived in the town, and it was "according to one traveler, 'an ill built, empty little town.'<sup>43</sup> Still, if Colchester no longer rivalled Alexandria as a prominent seaport, its land owners strove to protect the town's remaining functions. While continuing to serve as a collection point for local produce, Colchester's survival depended on the travelers who passed through on the King's Highway, the main north-south post road. A ferry, owned by George Mason of Queens Hall, crossed the Odocogus River at Colchester, providing a lucrative service for the Mason family and ensuring the flow of traffic through town. Not surprisingly, Mason did his utmost to protect the monopoly which his ferry enjoyed over the Odocogus. In 1784, for example, when John Hoge petitioned the legislature requesting permission to establish his own ferry across the river west of Colchester, Mason responded quickly with a counter-petition which argued that Hoge's ferry was "unnecessary" and "productive of much injury & Oppression to the People in its Consequences." Most disturbing, Hoge's ferry required a "new

road from Danbrou to Alexandria' which would bypass Colchester. Despite Mason's opposition the state assembly approved Fleece's application, and the ferry began operation in 1766.<sup>71</sup>

Mason's description of Fleece's ferry as a "mere head Forty-Job" was undoubtedly true, but it could also be used to characterize his own efforts to protect the old route. For Mason and the inhabitants of Colchester maintaining the ferry monopoly was essential to the town's survival. Mason's son Thomas, who acquired the ferry upon his father's death in 1769, made similar efforts to protect the family's investment. In May 1769 Nathaniel Elliott and Isaac McPherson, who had established an extensive trading operation in Prince William County one and a half miles above Colchester, asked permission to build a toll-bridge across the Occoquan to replace Fleece's ferry. Mason reacted by requesting authorization to build his own toll-bridge at Colchester, adding that "long experience has proved" his site "to be the best & certain that the situation of the country will admit." Working to avoid taking sides among local competitors, the legislature authorized both petitions to build bridges.<sup>72</sup>

However, in the darkness, observing the outcome of this competition could not have been in doubt. Originally a tobacco town, Colchester had never adapted to the switch to wheat and only its location on its original transportation route enabled it to survive. In contrast, the Occoquan toll-bridge built by Elliott reflected and extended the changes in northern Virginia's

economy. When John Smith visited the mills in 1882 he marvelled at 'the power of the two huge mills, whose work . . . is scarcely inferior to that of the great falls of the Potomac'.<sup>1</sup> Reflecting the rapid growth of the mills at Occoquan (which one observer noted could grind over 500,000 bushels of wheat per year), the state authorized the establishment of a flour inspection there in 1880. Four years later Elliott requested the incorporation of the town of Occoquan, home to 'several handsome houses,' and the legislature readily assented.<sup>2</sup>

The final showdown between the two towns occurred in 1888. Elliott widened and improved the road through Occoquan and subsequently obtained the federal postal contract for the region. By August he had begun to transport the mail through his mill town, bypassing Colchester. Elliott's actions sparked a virulently newspaper attack. Employing language that expressed concern for the general welfare, 'One of the Community' contended that the new road added three miles to the distance between Alexandria and Washington and carried the traveller through 'country infinitely more inferior'. He also accused Elliott of breaking the law by altering the mail route without the approval of the postmaster general. The writer's expressions of concern for the public welfare were admirable, but his real intention was to defend the economic interests of Colchester's wharfsmen. Unfortunately, the rhetoric of community had multiple applications. A few weeks later, an assigned commissioner defended the

new road, noting that in shaving some forty-five minutes off the traveling time between Alexandria and Danville, the builder "had done the state some service" and deserved to be "indagated." Both fortunes, then, employed public-spirited language to further their interests, though neither was particularly convincing. However, Onizans, a product of the shift to wheat and an entrepreneurial miller eager to capitalize on the changing economy, obviously prevailed—with a little help from estate. In 1803 a spring fever had worked on Colchester "incredibly strong and safe bridge" and it was now rebuilt. By that time the town, a product of an earlier economic era, had "entirely gone to decay; not a merchant or any man of large business there."<sup>10</sup>

Colchester's decline, however, was unusual in this period. Prince George County was full of projecting local elites trying—though not always successfully—to establish new urban places. The town of Centerville represented a marginally successful effort. The town's promoters originally petitioned the Virginia legislature in 1798 for the creation of a town to be called Manassettown. They noted that the proposed site of the town offered many advantages. It was situated on the Colchester Road and lay "central or nearly so" to a number of regional population centers, including Alexandria, Colchester, Danville, the Falls of the Potomac, Middleburg, and Leesburg. The petitioners also noted that the town lay "in the midst of a rich & flourishing Neighbourhood." These considerations they concluded

provided reasons to believe that "under proper conduct" the place would "become in a short time respectable as a manufacturing Town." A counter-petition offered by Thomas Adams and Frederick Carr Lane, existing local land owners, doomed the first attempt, and a second petition the next year was rejected on a legal technicality. Undeterred, the petitioners, this time with Adams and Lane supporting the project, offered a third petition in 1798. They requested the town be called Centerville (reflecting its central location) and emphasized again its promise as "a place immediately calculated for an inland manufacturing Town." The Virginia Assembly responded favorably incorporating the town in late 1798. In the following July the town trustees held a public auction of 100 half-acre town lots.<sup>24</sup>

In its early years Centerville functioned as a local service center for area farmers, and by the early nineteenth century at least five post mills operated within a few miles of the town. Indeed, one group of petitioners could report in 1797 that Centerville "is growing fast into a considerable" place. Still, the town's economic welfare depended on the traffic of the Colchester Road. As one of the main thoroughfares between the valley and the Potomac ports, the road provided customers for Centerville's tavernkeepers, merchants, tanners, blacksmiths and other travel-oriented tradesmen.<sup>25</sup> The town inhabitants' reliance on the road in 1798 to the Fairfax and Loudoun Turnpike, whose builders contemplated bypassing Centerville, is thus readily understandable. The collapse of this road,

project protected the economic investment of town residents for a time, but eight years later they would face a similar battle when the diversion of the Little River Turnpike chose a route to the north of Centerville. The Oldhamer Road, then, provided an unstable economic foundation for the town, and in the late 1780s decentralized town leaders began searching for alternative locations for their village.<sup>77</sup>

In 1788 the Virginia legislature revamped the Virginia legal system and established an intermediate level of justice, the district courts. Eventually, the state was divided into fifteen counties, with Loudoun, Fairfax, Prince William and Frederick comprising a single district. Dumfries, in Prince William County, was fixed as the site of the new court. However, the assembly's choice proved objectionable throughout the four counties, primarily because Dumfries lay at the eastern edge of the district, distant from most of its inhabitants. In response, a search for a more centrally located town to house the district court began. By 1797 district residents had fixed on two sites: Centerville and Red House in western Prince William. A petition in favor of Centerville explained that the town was "more central than any other town in the said District being almost equally distant from every part thereof." Petitioners who favored Red House countered that, "from a geographical view" Red House lay at the "central point" of the district. Moreover, the impending creation of the District of Columbia (which included Alexandria) would remove nearly half

the residents of Fairfax County from the district courts jurisdiction and "throw the centre of population considerably further westward."<sup>15</sup>

Faced with these competing factions vying for a prize which would decide the economic future of each town, the state assembly decided to take no action. However, the problem did not go away. Two years later a series of taxmen petitions signed by over 600 individuals once more requested that the district court be removed from Dumfries. The petitioners noted, however, that they desired neither Centerville or Red House, but rather "the most central situation in the district" and asked that commissioners be appointed to decide the proper location of the court. Fearing that their town would not be chosen, Centerville leaders responded with two petitions signed by over 500 individuals. Once more, they located the town's centrality and added that "very numerous subscriptions may be collected on from individuals towards erecting the necessary public buildings." The legislature, once more avoiding a difficult choice, appointed seven commissioners to study the situation and decide upon the most likely spot.<sup>16</sup>

In the late summer of 1802 the commissioners decided upon Red House for new incorporation as the town of Haymarket<sup>17</sup> and ignited a short though vicious newspaper war over the most appropriate location for the court. It was clear, however, that district residents no longer considered Centerville a viable choice; the battle now raged between the advocates of Haymarket and those who supported keeping the district court in Dumfries.

Faced with this continuing local struggle the state legislature still hesitated, and not until 1803 did it choose Haymarket as the seat of the district court.<sup>40</sup> For Centerville's residents the decision was disappointing; the town had lost widespread support among the local population three years earlier still, Centerville's early history is unfortunate. Though the town never became anything more than a local service center, it was not for lack of trying. Town leaders made concerted efforts to provide a secure economic base for the town first, by trying to protect the town's advantageous location on an important transportation route, and later by attempting to acquire administrative functions for the village. Perhaps this locally explains why Centerville endured while other recently incorporated towns such as Monticello vanished. By the early 1800s, despite having suffered a period of "decline," Centerville's 300 inhabitants (which included Quakers, artisans) manifested a "spirit of industry and enterprise." Clearly, the same spirit had been present throughout the town's early history.<sup>41</sup>

Other efforts at town creation in Fairfax County failed completely. In 1786, for example, both John Mason and John Parkeville – wealthy Fairfax County landowners – petitioned the Virginia legislature for the creation of towns at transportation junctions. Mason had not only roads on nearly every acre of his land lying to the west of Alexandria "opposite the City of Washington and George Town." He believed that the prospective town's location "at the highest point of the Navigation" and at the point where a

ferry crossed the Potomac made it a "situation eligible for the Establishment of a Commercial Town." During the same legislative session Turberville petitioned for permission to establish a town on twenty acres of his land a few miles upstream from Mason's near the Little Falls. This was offered an eligible spot for a town because from the road between the Great Falls and Alexandria intersected with a branch of the Ridge Road which crossed the Potomac at the recently completed Falls Bridge and entered Georgetown, Maryland. The Virginia legislature responded favorably to both petitions and in 1798 incorporated South Haven and Turberville. However, neither town became anything more than a paper creation. The proximity of Alexandria robbed the towns of functional significance and doomed both efforts from the onset.<sup>10</sup>

The town of Providence was more successful, primarily because it was created in response to the relocation of the Fairfax County court house. As early as 1789 the county had debated the need for a new court house to replace the crumbling building located in Alexandria. Rural residents, led by George Mason, argued for a location outside of Alexandria. The establishment of a separate town government which had a "complete & unlimited [red] Jurisdiction of all Issues between their own Citizens," argued Mason, gave town residents "little interest" in the doings of the county court. In addition, county residents believed a more central location would lower travel costs and encourage better attendance at court. Alexandria

residents, recognizing the enormous benefits of locating the court in town, vehemently attacked the plan to move the court house. The state, however, decided to follow the advice of many residents and authorized the removal of the court house to Fane's Ordinary, about ten miles west of Alexandria.<sup>101</sup>

Unfortunately, the assembly's decision did not end the debate.

Commissioners expected to find a suitable site at the new location reported in May 1798 that they could find "no proper situation for erecting public buildings" because the land contained "no good water." The commissioners therefore set off a new round of appeals to the legislature, both for and against the court's removal from Alexandria.<sup>102</sup> This time, the legislature refused to enter the local debate and while the court house in Alexandria continued to deteriorate the question remained undecided. Not until 1798 with the removal of Alexandria into the District of Columbia approached did the state finally authorize a new location for the county court. At the same time the assembly enlarged Fairfax County to compensate for the loss of Alexandria, it authorized the removal of the court to a more central location that reflected the county's westward expansion. The court eventually settled on a site about sixteen miles northwest of Alexandria on the proposed Fairfax and Loudoun Turnpike (later the Little River Turnpike) where it intersected with Old Road, which extended south to Colchester. Construction began in 1798 and the new court house was complete by April 1800.<sup>103</sup>

The county purchased the land upon which the court sat from

Richard Ratchiff, who in addition owned another house on acres surrounding the public building. Within a few years the county authorized the construction of a jail, a clerk's office and a courthouse. In addition Ratchiff constructed a tavern, kitchen, stables, shop, and barnyard on the surrounding land in response to the large number of merchants who regularly attended the court. Only the imminent completion of the Little River Temple to the court house in 1804, however, convinced Ratchiff to lay his property out into lots and petition the legislature for a new town. The assembly incorporated Providence in 1805, though county residents generally referred to the place as Fairfax Court House. The administrative functions located in the town and its situation on the river guaranteed economic stability, but Fairfax Court House never enjoyed a more developed economy largely because of its proximity to Alexandria. As a result, as late as 1810 only 200 people resided in the town, a population which included four attorneys, four taverns, and two physicians.<sup>40</sup>

Providence, however, was situated in northern Virginia. Most urban growth in the twenty-five years after the Revolution did not reflect governmental functions but rather the efforts of land owning entrepreneurs who casted towns to capitalize on the opportunities presented by a growing population and the shift to grain farming.<sup>41</sup> In the process these "adventurers" constructed a relatively complex urban hierarchy centered on

Alexandria and Winchester, but dependent on numerous small local centers for the provision of services and the collection of produce. The towns, buildings and business of the region unified the 'projecting spine' which swept northern Virginia after the Revolution, and the economic development of the region centered in the urban places they established. As a result by 1800 far from being an entirely rural region, northern Virginia had experienced significant urban development. Indeed, the region's prosperous agrarian economy would not have been possible without the numerous towns which dotted the countryside.

#### Notes

1. See Table 5.1 and Figure 5.4. The term 'satellite' industry comes from Albert O. Hirschman. *The Economics of Economic Development* (New Haven: Yale University Press, 1958) 389-394, 399. The quote in the chapter title: October 26, 1778, Loudoun County Legislative Proceedings, 1775-1800 (Library of Virginia, Richmond, Virginia; hereafter LCV).

2. David S. Goldfield, *Cotton, Fields and Shreveports: Southern City and Region, 1850-1880* (Baton Rouge: Louisiana State University Press, 1965) 12-30; Carville Earle and Ronald Hoffman 'The Urban South: The First Two Centuries.' *The City in Southern History: The Growth of Urban Civilization in the South*, Blaine A. Broward and David S. Goldfield eds (New Washington, NE: Broadview Press, 1977) 30-58, 39-44; and 'Slavery, Crops and Urban Development in the Eighteenth Century South,' *Perspectives in American History* 19 (1976): 19-36; Carville Earle 'The Evolution of a Tidewater Slave-market System: All Hallows's Parish, Maryland, 1680-1725' (Chicago: University of Chicago Department of Geography Research Paper No. 170, 1974), 85-100; John Spencer Bassett 'The Relation Between The Virginia Frontier and the London Merchant,' *American Historical Association, Report* 4 (1904): 533-573; John C. Staudach 'The Changes of Towns in Eighteenth Century Virginia,' *Journal of Southern History* 35 (April, 1969): 343-363; Patricia Harrison, *Landmarks of Old France in Ohio: A Study of Origins in Northern Virginia* (2 Volumes) (Richmond: Old Dominion Press, 1934), 2: 302-303. The quote is from

William Grant Sumner, *The Negro South in American History* (New York: Greenwood Press, 1968; originally published, New York, 1902); 14.

3 Elizabeth Fox-Genovese, *Within the Plantation Household: Black and White Women of the Old South* (Chapel Hill: University of North Carolina Press, 1988); 70-78; Eugene D. Genovese, *The Political Economy of Slavery: Studies in the Economy and Society of the Slave South*, Second Edition (Middletown, CT: Wesleyan University Press, 1985; originally published, 1963); 157-229; Goldfield, *Cotton Fields*, 28-37; Henry Louis Smith, 37-38, 126, 196. Perhaps the most trenchant expression of the backwardness of Southern urban life was made by W. J. Cash. In the South he noted three "trends as intense as ever as more than looking points were New Orleans, Charleston, Richmond, and Norfolk have perhaps more or less towns at all, far even these four cities of which were scarcely more than overgrown villages were rather more depots on the road to the markets of the world, more adjacent to the plantations, than living centers in their own right" see *The Mind of the South* (New York: Vintage Books, 1991; originally published, New York, 1940); 94. Fox-Genovese, *Plantation Household*, 75; and Steven Hahn and Jonathan Priddy eds., *The Character of the Age of Capitalism: The Transformation: Essays on the Social History of Rural America* (Chapel Hill: University of North Carolina Press, 1992); 5 identify the "white threshold" in 1780 as 1,700.

4 Population figures for the towns and the region in the text, Table 5.1, and Figure 5.8 were taken from a variety of sources. These include Nath Schachar Yantis and Horace Spenshaw Love, *The 1287 Census of Virginia*.... 3 Volumes (Springfield, VA: Genealogical Books in Print, 1987), 1: 55-77, 400-581; 2: 1089-1070; 1788-1800; *Records of Families in the First Census of the United States taken in the Year 1790, Records of the State Examinations, 1788-1793*, Virginia (Washington: Government Printing Office, 1948); 9-19; *Statues of the Slave Number of Persons within the Several Districts of the United States According to... the Second Census... of the United States* (New York: Harrow Book Publishing Inc., 1944; originally published Washington, 1801); unpaginated; *Approximate Amount of Each Description of Persons within the United States of America, and the Territories Therof, According to... Enumerations Made... at*... 1810-5 Volumes (New York: Norman Ross Publishing Inc., 1970; originally published Washington, 1811); 2: 34-54a-55; Joseph Smith, *The United States Gazette: Containing an Authentic Description of the Several States, Their Capitals, Extent, Boundaries, Climate, Population, Trade, and Manufactures*... (Philadelphia: F and R Bailey, 1793); unpaginated; Jakobek Morse, *The American Geographical*... (New York: Arno Press, 1971; originally published Boston, 1787); unpaginated; R. Bunker Beards, *General Statistics: Embracing, or Compendium*

*Geographical Dictionary of Virginia*.... (Edinboro: Joseph Cushing 1843) inserted pages; J E Worcester, *A Gazetteer of the United States Abstracted from the Historical Gazetteer*.... (Andover: Fogg and Gould 1848) unpaginated; Charles Vail, *Topographical Description of the Counties of Frederick, Berkeley and Jefferson, Situated in the State of Virginia* (Winchester VA, W Henshall 1848) passing; Joseph Martin, *Compendious Gazetteer of Virginia and the District of Columbia*.... (Charlottesville VA: Mosley and Tompkins 1853) 168-173 208-214 222-247 257-262 267-273 277-278 279-284 T. Richard Miller, *Settlements and Settlements of Alexandria, Virginia, 1780-1830*, 2 Volumes (Beverly MA: Heritage Books, 1991 1993) 1 also Robert D Mitchell, *Communities and Frontiers: Perspectives on the Early Shenandoah Valley* (Charlottesville: University Press of Virginia, 1977) 165-201. Following Mitchell (197) I have assumed (except where precise information is available) that when a town was incorporated it had a "minimum population" of 100 people or twenty families. The establishment and incorporation of towns in northern Virginia can be followed most easily in the town legislation passed by the Virginia assembly. For town legislation in 1779, see W W Hensley ed. *The Statutes at Large: Being a Collection of all the Laws of Virginia, from the Year 1606* 15 Volumes (Richmond, New York and Philadelphia, 1803-1819) 4 216 260-267 (Alexandria) 268-270 (Winchester) 269-280 (Edinboro) 7 234-238 (Stephensburg and Leesburg) 400 (King's Mountain) 5 471-482 (Pawnee) 6 247-248 (Shady) 248-273 (Shenandoah) 22 208-211 (Charlottesville) 400-408 (Middleburg) 407 (Kearneysville) 472-473 (Front Royal) 12 179-173 (Middletown) 288-289 (Charlottesville) 290-291 (Charlottesville) For town legislation in 1806, see Samuel Shepherd ed. *The Statutes at Large of Virginia, from October, 1799 to December, 1806*.... 3 Volumes (New York: AMS Press 1978 originally published Richmond 1806) 1 322-323 (Middletown) 3 120-121 (Honeyville and Smithfield) 171-178 (South Harris and Tuckerville) 222-224 (Springfield and Kernstown) 279-281 (Waterford) 282-283 (Hillsborough) 3 171-175 (Fayetteville)

6 See, for example, Vail, *Topographical Description*, who identifies all but the smallest communities in the lower valley as "towns" and Martin Compendious Gazetteer, who identifies all urban centers in northern Virginia as "villages," with the exception of Winchester and Alexandria which are labeled "towns." See also Jack Paine, "Economic Function and the Growth of American Park Towns in the Eighteenth Century," *Perspectives in American History* 2 (2004) 164 who notes that "the maps" of Virginia were "filled with places that contemporaries considered towns"

7 Darrell H. Rasmussen and Anita H. Rasmussen, "The Genesis of a Chesapeake Town" and "The Village South," *Small Worlds, Large Questions: Explorations in Early American Social History, 1600-1800* (Charlottesville: University Press of Virginia, 1984), 124-128, 131-137. See also Peter "Antietam Post-Town," 128-132 who argues for "a functional approach toward the life of 'towns'" in order to understand the growth and decline of American urban centers. In other instances, we ask "What functions did the towns perform as their regional centers?"

8 My understanding of central place theory comes from a variety of sources. See Walter Christaller, *Central Places in Southern Germany*, *Central Places*, trans. (Englewood Cliffs, N.J.: Prentice Hall, 1966) originally published 1933; passim, Leida J. King, *Central Place Theory* (Berkeley Hills: Sage Publications, 1984), 9-40; Eugene Smolensky and Donald Raskopuk, "The Conception of Cities," *Explorations in Ethnohistorical History 2* (Winter 1982), 98-121; Bruce Barton, "The Genesis of Centrality," *Annals of the Association of American Geographers 68* (March 1978): 24-44; and James T. Lennon, *The Best Foot Man's Country: A Geographical Study of Southwestern Pennsylvania* (New York: W.W. Norton, 1974) originally published 1952, 129-148. The underlying insight (though not the terminology) of central place theory about the urban place and its rural hinterland share an intimate economic linkage as reflected in a growing number of works on urban history and regional development. See, for example, Roberto Roberto Miller, *Cities and Hinterland: A Case Study of Urban Growth and Regional Development* (Wolfeport, CT: Greenwood Press, 1979); Timothy S. McInerney, *Early Towns in the Great West: The Structure of Precolonial Urbanism in the American Midwest, 1600-1875* (Cambridge: Cambridge University Press, 1988); and William Cronon, *Nature's Metropolis: Change and the Great West* (New York: W.W. Norton, 1991). As Cronon notes (p. 82-3), "city and country are mutually dependent and maintain relations periodically mediated between them. A rural landscape which cradles the city and an urban landscape which cradles the country are mutually incomplete as portions of their shared world."

9 Barth and Hoffman, "Maple Crops," 26-48; idem, "Urban South," 49-51; Lennon, *Best Foot Man's Country*, 127; Harry Roy Morrison, *Colonial North Carolina in the Eighteenth Century: A Study in Historical Geography* (Chapel Hill: University of North Carolina Press, 1964), 118-119; Joseph A. Ernst and H. Roy Morrison, "Charlotte-Town-to-Peter the Great: The Urban Process in the Southern Colonies During the Eighteenth Century," *William and Mary Quarterly*, 3rd Ser., 30 (October 1973), 248-278; Morrison, *Waldenwater: Urbanism in the Colonial South: A Critique*; Williams and Mary Quarterly, 3rd Ser., 31 (October 1974), 688.

Frederick F. Siegel, *The Roots of Southern Discontent: Slavery and Society in Tidewater Virginia, 1730-1800* (Chapel Hill: University of North Carolina Press, 1965), 66-67. The concept of forward linkages comes from Hirschman, *History of Economic Development*, 98-119. Other historians have noted the close connection between grain production and cotton growth outside the South; see, for example, Mahoney, *From Slaves of the Great West*, 308-320, 330-337, 331; and Morton Katzberg, "Slavery, Free Wheat and Cotton Exports: A Critique in Marketing Hypotheses and Economic Development," *Agricultural History*, 40 (April 1966), 81-108. On the connection between exports and general economic development (including cotton growth) see, Douglas C. North, "Location Theory and Regional Economic Growth," *Journal of Political Economy*, 83 (June 1975), 243-258; and Charles M. Tiebout, "Exports and Regional Economic Growth," *ibid.*, 84 (April 1976), 280-288.

18 Henry Statutes at Large, 4: 214. Thomas Mallory Peacock, "Eighteenth-Century Alexandria: Virginia Before the Revolution, 1749-1776," Ph.D. Dissertation, The College of William and Mary, 1977, 10-14, 98-104, 106-112; also, "Alexandria and the Evolution of the Northern Virginia Economy, 1749-1776," *Virginia Magazine of History and Biography*, 89 (July 1983), 343-384; James Donald Hanson, "From Empire to Commonwealth: Alexandria, Virginia, 1733-1776," Ph.D. Dissertation, University of Maryland, 1984, 18-25, 100-105, 132-145. Alexandria's pattern of economic development was similar to that of other tobacco towns in the Chesapeake; see, Price, "American Port Towns," 162-173. See also Karl, *Alexander's Richmond*, 94-104; Karl and Hoffman, "Urban South," 40-44; and Paul D. Kupper, *The Atlantic Economy and Colonial Maryland's Eastern Shore*, *From Tidewater to Deep Waters* (Baltimore: Carroll University Press, 1980), 189-204.

19 Price, "Eighteenth-Century Alexandria," 81-82, 181, 238-240. Henry Statutes at Large, 4: 268-287. Many of Alexandria's noted merchants after 1770 were Scottish, as the rising importance of Scottish merchants in Virginia generally before the Revolution; see, James H. Nafziger, "Scottish Traders in Virginia, 1769-1774," *Economic History Review*, 2nd Ser., 12 (August 1960), 43-66. Following Price's classification of colonial ports, Alexandria before the Revolution was a "shipping point" and "limited port of call," see Price, "American Port Towns," 135-142.

20 Henry Statutes at Large, 4: 363-370, 7: 354-358. Marshall Commonsense and Zenger, 146-168. Warren Raymond Hollins, "Three Port Prospects: Frederick Virginia 1733-1833," Ph.D. Dissertation, University of Virginia, 1988, 68-70, 80-83, 124-127. Stuart R. Brown, *Yamhoea Burns: The Story of Thomas P. B. Lord, Fiddler* (Shenandoah, Va.: Shenandoah Book Company, 1980), 147-148.

13 *Howing Statistics at Large*, 3: 334-336, 1: 338, 342 Edith Moore Spruill, *Chatham, Colonial Port on the Potomac* (Purcell, VA: Fairfax County Office of Comprehensive Planning, 2005) [www.fairfaxva.gov](http://www.fairfaxva.gov), Harrison, Old *Prince William*, 2: 404-435

14 *Howing Statistics at Large*, 3: 334-336, James Clapen Bedford "Slavery and Slaveryment in Loudoun County, Virginia, 1790-1860," Ph.D. Dissertation, University of Virginia, 1974, 53-180; *Sherrison Walker's Legends of Loudoun: An Account of the History and Names of a Border County of Virginia's Northern Neck* (Kalamazoo: Gannett and Moore, 1944), 111-113. In 1714 Nicholas Greenwell described Leesburg as "very comfortably built and five wharves and later trade was extensively started" see A.G. Bessley, ed., *The Journal of Nicholas Greenwell, 1713-1717* (New York: Abel Press, 1928), 48. Alexandria's effect on the growth of neighboring towns was similar to the effect of Philadelphia on towns which lay within thirty miles of it: see Lermon, *West Port Mouth County*, 112, 130-131.

15 *Howing Statistics at Large*, 3: 334-336, Mitchell, *Comprehensions and Frontiers*, 174-177

16 *Howing Statistics at Large*, 3: 404, 5: 355-360; Michel Henshaw Gardner and Ann Henshaw Gardner, *Chronicles of Old Berkeley: A Narrative of a Virginia County from Its Settlement in 1633* (Warrenton, NC: Southern Press, 1934): 55-58; Samuel Keweenaw, *A History of the Valley of Virginia*, Fourth Edition (Shenandoah, VA: Shenandoah Publishing House, 2005; originally published, 1893), 177

17 Mitchell, *Comprehensions and Frontiers*, 98; also, "The Shenandoah Valley Frontier," *Geographical Perspectives on America's Past: Essays on the Historical Geography of the United States*, David Ward and (New York: Oxford University Press, 1976), 204; Freeman H. Hart, *The Valley of Virginia in the American Revolution, 1753-1780* (Chapel Hill: University of North Carolina Press, 1948), 18

18 Mitchell, *Comprehensions and Frontiers*, 172-174. at 186 lbs. per barrel, this was approximately 1,600 barrels of flour per year. See also Lewis, *Coal Camp: History of Agriculture in the Southern United States to 1880*, 2 Volumes (Hingham, MA: Peter Smith, 1958; originally published, 1933), 1: 184-186. On the changes in wheat farming wrought by the Revolution, see also Mitchell, "Agricultural Change and the American Revolution: A Virginia Case Study," *Agricultural History* 47 (April 1973) 113, 118-120; W.A. Low, "The Farmer in Post Revolutionary Virginia, 1780-1790," *Agricultural History* 25 (April 1951): 169-186; and Mark, *Valley of Virginia*, 55-181

19 Gardner, *Old Berkeley*, 14-18, 23-24; Brown, *History of Berkeley County, West Virginia* (Morgantown: previously published by the author, 1898), 89-90; *Erasmus Gamble and Alexander Affranchi* (August 4, 1794; *Verde, Departmental Description*, 29-30). By the mid 1790s (Stephens)town's role as a wheat and flour collection and storage location was being tested by at least one local merchant: see advertisement of Nathaniel Henry, *Edmund Garsden & Berkeley, Auctioneer*, February 23, 1795, who promoted his "convenient SHEDS" "near the landing for storing Flour, boats . . . are also prepared by the subscriber, who will freight flour with great expedition and exact notice" rather than West's Branch, Great Falls, Gauley River or Maryland; Stephens)town also had a tobacco inspection station. In 1794 Berkeley County residents petitioned the Legislature for a tobacco warehouse noting that "many inhabitants at this time Cultivate a large quantity of Tobacco" Stephens)town, they anticipated, would be a suitable location because a lay on the Potomac River which would "easily be rendered sufficiently Navigable to Transport that bulky commodity to Market" see November 22, 1794, Berkeley County Legislative Petitions, 1790-1805, LCV and *History, Statutes at Large*, 75, 717-718.

20 Gardner, *Old Berkeley*, 14-18, 23-24; Brown, *History of Berkeley*, 89-90; Harry Toulson, *The Western Country in 1793. Reports on Kentucky and Virginia, Marine Trading and Geology Survey*, eds. (San Marino, CA: Henry E. Huntington Library, 1944), 49; October 19, 1790, *Frederick County Legislature Petitions*, 1776-1805, LCV; this petition is reprinted as "Inspection of Wheat," *Edmund and Mary Garsden's* (last Nov. 2-October 20) 288-294. The contemporary *Spain* is from *Verde, Departmental Description*, 7, 21, 26; Maclell, *Commerce and Flouring*, 179; estimate that there were over 400 grist mills in the lower valley in 1800, though he provides no source for this figure. Teach Cox, *A Statement of the Arts and Manufactures of the United States of America for the Year 1818* (New York: Newina, Rome 1849) originally published, 1818, 178-119 estimated that in 1800 there were seventy six merchant mills in Berkeley, Frederick and Jefferson counties producing 196,208 barrels of flour valued at \$1,128,000. However he recorded no mills in Jefferson County, despite the fact that the county produced 47,356 barrels of flour valued at \$568,000. Twenty years earlier, Cox had noted that "Virginia appears to making a greater progress in merchant mills than any state in the union" see *A Plan of the United States of America* . . . (Philadelphia: William Hall and Wrayley Devaux, 1794), 303.

21 Philip Vickers Feltus, *Journal, 1773-1776, Written on the Virginia Frontiers from the Front and the Army Around New York*, Robert Greenhalgh Allen and Laurence Gotsman eds. (Princeton: Princeton

University Press, 1938. 11. Garland, Ed., *Berkeley*, 30-38 May 14, 1777, Berkeley County Legislative Petitions, LGV, *Passing Statistics at Large*, 9 585-871.

12 November 4, 1780 Berkeley County Legislative Petitions, LGV, *Shepherd Statistics at Large*, 1 211-279.

13 Between 1781 and 1787 six Martinsburg milling firms advertised in the *Potomack Guardian & Berkeley Advertiser*; see, August 28, 1782 (Stephen O'Ferrall); May 7, 1783 (Henry Weaver); December 28, 1785 (Oliver Wetherham and Joseph Flagg); August 4, 1786 (firm of William Boyd and Henry Weaver); August 18, 1786 (firm of Frederick Latta and Alexander Campbell). See also *Knox Berkeley County, MD*, who identifies four mills in the Tidewater.

14 By 1785 there were enough papers in Martinsburg and the surrounding area for Jonathan Tucker and Joseph Harris both Martinsburg, proposed to call a meeting "for the purpose of consulting and determining on a regular press for the County" see *Potomack Guardian & Berkeley Advertiser*, July 4, 1785. On the need for newspapers in Martinsburg see *ibid.*, May 9, 1785 where the Alexandria merchants Thomas and Samuel Venable announced they needed "TWENTY EIGHTS" "to carry Paper to Alexandria and Hager's Ferry" see also, *ibid.*, August 28, 1785. On paper makers and wheelwrights see *ibid.*, July 1, 1785 and September 2, 1785.

15 *ibid.*, November 24, 1781, February 23, June 20, July 4, and September 3, 1785 (handbook). For paper and literature see, *ibid.*, June 27, 1784 (John Scher), May 9, 1786 (John Schlessinger) and May 23, 1786 (Christopher and John Steinbocker). For Martinsburg's lower paper and young market see, *ibid.*, March 8, 1787 (John Lougugh).

16 In 1787 there were 11,618 cattle in Berkeley County or just over four animals per white taxable. Livestock breeding was also significant in Frederick County where there were 11,118 cattle, or just over two animals per white taxable. see, Schreiner *Taxes and Loss*, 1782 Census, 1 1368-1407, 2 494-503. On taxes see, *Potomack Guardian & Berkeley Advertiser*, June 28, 1784 (John O'Ferrall), and November 9, 1787 (Paul Venable). On currencies see, *ibid.*, Jan. 23, 1785 (Wald & Mafford). Thirty years later Martinsburg contained two taverns, two distilleries, and two shoe manufacteries see *Harvey Compensander, Gazetteer*, 87. The leather trade was an important industry in the lower valley. Indeed, in 1818 Berkeley and Jefferson counties (around out of Berkeley in 1800) produced 12,608 hides valued at almost \$40,000. This was fourth in the state behind Frederick County, Richmond and Norfolk. In addition, 12,548 pairs of shoes valued at \$77,863 (third in the state) and \$19,328 worth of

millinery (madek several) were manufactured in the two counties; see, Case, *Statement of* . . . Arts and Manufactures, 100-101.

27 Martha M. Wilkes noted the *Farmers' Guardian & Berkeley Advertiser* from Shepherdsboro to Martinsburg in 1792. The first notice was published in Martinsburg in August 23, 1792.

28 Clock and watch makers: *Farmers' Guardian & Berkeley Advertiser*, September 8, 1792 (twice) and September 26, 1792; gunsmiths/goldsmiths: *ibid.*, March 11, 1794; shoemakers: *ibid.*, May 9, 1792; doctors: *ibid.*, August 26, 1792; April 14, and December 6, 1794; blacksmiths: *ibid.*, June 19, 1794; Miller and dye: *ibid.*, July 1, 1794; dentists: *ibid.*, February 23 (twice), March 2, May 9, 1795, and December 28, 1795.

29 York, *Temperance's Description*, 23-24. The women tavern keepers were Elizabeth Armstrong and Mary Graham; see *Farmers' Guardian & Berkeley Advertiser*, March 25, 1798, and November 9, 1797.

30 *Pittsboro Journal*, 11; May 14, 1771, and November 4, 1798. Berkeley County Legislative Petition, LGV. *Farmers' Guardian & Berkeley Advertiser*, July 1, 1798. Letterers were, as Chapter 4 points out, a common method of raising capital for public improvement projects in the early republic.

31 *ibid.*, September 1, 1792, and *ibid.*, February 22, March 2, May 9, 1794.

32 *ibid.*, August 4 and 18, 1798. The Yankee trader was regularly depicted by Southerners. For one contemporary example see John Bertram, *Reflections on America*, 1793-1843 (New York: Harper & Brothers, 1847), 80-88; see also David Berkeley, *The Lost South* (New York: Oxford University Press, 1947), 180. Bertram Wrote Brown, *Southern Home, Palace and Refectory in the Old South* (New York: Oxford University Press, 1968), 112-217, argues that a "collective history" of antebellum Southern merchants would reveal a decided preference for planting, and that the only occupations accorded prestige in Southern society were planting, professional work, and military careers (369-491).

33 For a general description of manufacturing in the Shenandoah Valley after the Revolution, see Mitchell, *Commerce and Frontier*, 204-218.

34 November 2, 1778. Berkeley County Legislative Petition, LGV. *History Station at Lees*, 9, 247-248. Newberry, *Valley of Virginia*, 171-178. The willingness of the Virginia assembly to appropriate Fenton's land

was undoubtedly motivated by his refusal to take on such onerous responsibility to the English crown: see Brown, *Yamasa, Roanoke* 178. *Yards Topographical Description* 74-75; *Marine American Geographical Magazine*. The springs were a popular destination for travelers in the valley: for related descriptions of the usual life of Park in the early republic see *Fathers' Journal* 124-126; Frederick M. Heyerd, *Tenets of a Frontiersman in Maryland and Virginia*... in 1781... Rev C. McCary Green and ed. John Asher M1; Edwards Brothers Inc. 1962 originally published 1793; 28-40-47-51; and John Edwards Caldwell, *A Ride Through Park of Yamasa in the Summer of 1808*... William M.E. Sachel of Richmond. Dorr Press Inc. 1954, originally published 1807a; 31-32.

25. November 22, 1766. Berkeley County Legislative Petition: LOV, *House, Statutes at Large*, 12: 474-475. *Yards Topographical Description* 74. *Marine American Geographical Magazine*. *Quarter Old Berkeley*, 25. *Kennelwood Valley of Virginia* 146. By the mid-1760s traders had begun to concentrate in Charles Town that at least two traders took action to organize their livelihoods. On March 12, 1766 the carpenters and joiners of the town met "in order to regulate and augment the price of their work," and a month later the tailors collectively decided to raise "the price of their work to Five Shillings a suit", see *Patent Guardian & Berkeley Advertiser*, March 31 and April 7, 1766. The town also hosted a private academy: see, *For Laws for the Organization and Government of the Charlestown Academy in Berkeley County, Virginia, Adopted by the Board of Trustees*, 2d. Edition, 1788 (Norfolk: VA. Henry 1862 1788).

26. November 6, 1767. Berkeley County Legislative Petition: LOV, *House, Statutes at Large*, 12: 507. *Yards Topographical Description* 74.

27. *Front Royal*: November 4, 1766. Frederick County Legislative Petition: 1776-1800: LOV, *House, Statutes at Large*, 12: 492-493. *Yards Topographical Description*, 14. *Dunkirk*: November 12, 1761. Berkeley County Legislative Petition, LOV, *House, Statutes at Large*, 12: 586-589. The petitioners originally requested that the town be named New Jerusalem, and it was sometimes known as such; however, after its founder By 1740 the town was home to 180 residents, including four taverns, three merchants, two blacksmiths, two weavers, a tailor, a cabinet maker, a wagon maker, and a whiskey distiller: see *Quarter Old Berkeley*, 47-48; and *Yards Topographical Description* 34. *Middleton*: *Shepherd, Statutes at Large*, 1: 322-323. There is no surviving petition requesting the town's incorporation.

28. *Perryville*: *Shepherd, Statutes at Large*, 2: 128-132. *Yards Topographical Description*, 14; and *Marine Geographical Magazine* 319 who notes that Perryville was home to an academy and "10 female schools"

in 1835. Smithfield: December 6, 1797. Berkeley County Legislative Petitions, LCV. Shepherd, *Statutes at Large*, 3: 329-331 and York. Topographical Description, 18. Kershaw: December 4, 1798. Frederick County Legislative Petitions, LCV. Shepherd, *Statutes at Large*, 3: 333-334 and York. Topographical Description, 18: who says that the town was only 3-14 miles from Winchester. In his *Quarantine* Martin did not mention Kershaw.

35. François Alexandre Pythion: *du défilé de Richelieu au défilé de Tarrytown Through the United States of North America, the Counties of the Maryland and Upper Canada, in the Years 1795, 1796, and 1797, with an Authentic Account of Lower Canada*. 2 Volumes. H. Newman, trans. London: R. Phillips, 1800. 2: 303-305.

36. On changing patterns of migration through the valley see Marshall, *Commercialism and Frontiers*, 145-156. On post 1775 western migration through Winchester and the lower valley see: Pihnen, *Journal*, 12. Issue W-44. *Travels Through the States of North America, and the Provinces of Virginia and Lower Canada, During the Years 1795, 1796, and 1797*. 2 Volumes (London, 1800). 1: 229-230. Trulman, *Virginia Gazette*, 97 SR. CV. Richelieuville: Lanesport. *Travels in North America*, 2: 161, and [Winchester: *Virginia Gazette*], April 22, 1799. June 10 and October 21, 1798. See also Henry Lee to James Madison, September 5, 1799. Madison Papers. Library of Congress. Serivches LC: who wrote that "most respectable in character[] Family & Fortune begin to leave us in every quarter" for the West. Winchester's merchants petitioned the Virginia Legislature in 1797 to protect a duty imposed on imports from other states. The tax threatened their control of "the Trade of the Western Country, the district of Kentucky [and] Indiana." November 5, 1797. Winchester Town Legislative Petitions, 1792-1805, LCV; see also *Virginia Gazette* and *Winchester Advertiser*, 9 September 14, 1797. On Winchester's western trade see also Marshall, *Commercialism and Frontiers*, 146-51, 200-251. Robert "Three Run Prospects" 223-229 and Richard K. McHenry "The Cattle Trade in Western Virginia, 1760-1802," *Appalachian Frontiers, Settlement, Society, and Development in the Trans-Allegheny Area*. Robert Milder, ed. (Lexington: University of Kentucky Press, 1992), 148-149.

37. Carr, *Face of the U.S.A.*, 212. 214-215. Bayard, *Travels in a Zephaniah*, 94. Trulman, *Western Country*, 97. Reale and Hickson, "Sage's Crags" 87 (passim). On the use of luxury trades in Winchester see: Willard F. West, "The Tinklers in the New Virginia," *Virginia Magazine of History and Biography*, 59 (October 1953), 356-363. Most years of Winchester's two newspapers in the 1790s and early 1800s reveal the diversity of commerce in the town: see, for example, *Virginia Gazette* and *Winchester Advertiser*, August 15, 1797 (goldsmith, tailor watch and clockmaker and carpenter).

December 2, 1790 (caddis, horse, and faller and deer) September 1 1790 (caddis and horse) and January 5 1791 (caddis). [Winchester] *Virginia Gazette* May 7 (and history), June 4 (quarter), and July 2 1790 (camp history) November 18, 1790 (caddis, horse, and caddis and horse) November 25, 1790 (caddis, faller, grey and faller and horse, and caddis and horse). [Ibid., July 9, 1790, describes a July 4 celebration and lists all the town's tradesmen who participated in the parade. John Nelson "Urban Growth and Regional Development: The Growth of Newport News, 1790-1850." David T. Gleason, ed. (Charlottesville: University Press of Virginia, 1987), 11-16, notes the "remarkable industrial development" of many interior towns in the early republic. Distinct from the manufactured goods exported into the seaports, such towns developed manufactures to supply the needs of the local subsistence and western seaports.

42 [Winchester] *Virginia Gazette* April 8 June 18 October 1 and July 9 1788. For other examples of support for manufacturing in Winchester and nationally see, *ibid.*, May 18, July 8, August 26 September 18 and December 20, 1788 March 4 April 1, May 27 June 17 and September 2 1789 and November 30 1790. See also, *Virginia Gazette and Winchester Advertiser*, August 22 and September 7 1790 April 9 1795 and February 4 and 26, 1798. On the national debate in Virginia over the Constitution and Patrick Henry's support of a stronger national government see: Norman K. Risjord, *Championed Politics, 1788-1800* (New York: Columbia University Press, 1979), 202-217, and Charles Henry Ashton, *Secessionism in Virginia from 1776 to 1863* (Chicago: University of Chicago Press, 1968) 52-60. On manufacturing support of the Constitution in general see John E. Nelson, *Liberty and Property: Political Economy and Policymaking in the New Nation, 1787-1812* (Baltimore: Johns Hopkins Press, 1987) 18-21. On the debate over the legitimacy of federal government intervention in the economy of the early republic, particularly in the realm of manufacturing see Drew McCoy, *The Elusive Republic: Political Economy in Jeffersonian America* (New York: W.W. Norton, 1982) originally published 1980 105-115, 138-165 and E.A.J. Johnson, *The Foundations of American Economic Disorders: Government and Enterprise in the Age of Jacksonian Mississippi* (University of Minnesota Press, 1972) 124-161.

43 Population of Alexandria: John W. Schopf, *Crucible in the Confederation, 1783-1794*, Alfred J. Newman, 1968, and ed., 2 Volumes (New York: Bergman Publishers, 1968) originally published 1769 1-108; Miller, *Alexandria and Merchants* 1 see, Introduction, December 1 1774 Alexandria City Legislative Petition, 1778-1808; LOV; House, *Statistics of Legals* 30 178 179; Maxson, "Empire to Commonwealth" 155-201; Powers of Town Council, May 21, 1795 Alexandria City Legislative Petition; LOV

Henry Statutes at Large, 11: 44-45, 53-55; Miller, *Arkansas and Merchants* 1; see *Virginia Journal and Alexandria Advertiser*, March 22, 1797, and *Columbian Mirror and Alexandria Gazette*, February 6, 1790. In 1800 the bylaws of the town, revealing the extensive powers of the town government, were published: see *Laws of the Mayor and Commonalty of the Town of Alexandria. To Which are Prefixed, Acts of the Legislature of Virginia Respecting the Town of Alexandria* (Alexandria, VA: John and James P. Westcott, 1800), 11-47; Naval Office, October 25, 1770; *Alexandria City Legislative Privileges*, LCV; Henry Statutes at Large, 19: 285; Shen Netherton, *Donald Frey: James Aronson, Fairfax County, Virginia, A History* (Fairfax, VA: Fairfax County Board of Supervisors, 2004), 125-128; Miller, "Charles Lee, Collector of Customs: Portrait of an Early Alexandria on the Waterfront," *The Alexandria Waterfront Forum, Birth and Beliefs, 1734-1862* (Alexandria, VA: Alexandria Urban Archaeology Program, 1985), 28-30; Ten Hays, "Sanction of Importers, 1760," *Williams and Mary Quarterly*, 3rd Ser. 1 (June 1944), 63-65, and November 14, 1758; *Alexandria City Legislative Privileges*, LCV.

44. *Virginia Journal and Alexandria Advertiser*, May 10, 1798.

45. *Virginia Gazette and Alexandria Advertiser*, September 30, 1789; Henry Statutes at Large, 13: 43-44. Donald Frey, "A Capital on the Potomac: A 1789 Broadside and Alexandria's Attempts to Capture the Chesapeake Press," *Virginia Magazine of History and Biography* 87 (January 1979): 75, notes that Henry Lee introduced the legislation to the Virginia legislature.

46. "Gentleman, the Permanent Residents of Congress."

*Extradite*, December 7, 1780 (Alexandria, VA: Samuel Hanson, 1780). All ten agents of the Extradite were merchants and sons of property in Alexandria and Georgetown. The Alexandria agents were John Fitzgerald, George Gilpin, Robert T. Kane, Charles Somers, and David Grant, all five associated with the Potomac Company. The four Georgetown agents were William Dethman, Howard O'Neil, Robert Peter, Benjamin Stockert, and George Walker, all but Walker associated with the Potomac Company. Group "Capital on the Potomac," 80-81, identifies only eight of the agents as being involved in the Potomac Company. Evidently, he overlooked Moore's ownership of one share, which was sold by his heirs after his death in 1813. See April 27, 1811, *Records of the Potomac Company: Records Concerning Transfer of Shares of Stock, 1791-1820* (National Public Service, Record Group 79; National Archives, Washington, D.C. [hereafter NA]). See also Kenneth S. Bowling, *Creating the Federal City, 1774-1800* (Potomac, Frost [Washington, D.C.: American Institute of Architectural Print, 2004], 58-59).

47 "The Permanent Residence of Congress." Fisher Ames, quoted in *Winchester Virginia Gazette*, September 30: 1790 Ames comments most fully on September 3, 1791 in the course of the Congressional debate over "Being the FORMALSIGHT RECORDS of the Federal Government on the MATTER of the MOUNTAINMAN." He was also probably responding to a pamphlet written by "A Citizen of America (John O'Connor)." *Political Opinions*, Particularly Respecting the Federal Congress (Philadelphia: Printed for the Author 1790), which listed the Thomas, Brown and Chase as more eligible as competitors to the Mountbush just one of the Pateman's many references. See *Working Document*, Entry 54

#### 48 "The Permanent Residence of Congress."

49 Strong, "Capital on the Potomac," 90-95 (R.D. Lee quote p. 93) see also *Working Document*, Entry 71-73 *Revised Chesapeake Review*, 185-188

50 For examples of Alexandria advertisements see *Virginia Gazette and Winchester Advertiser*, October 3, November 3, and December 7 1787 and *Winchester Virginia Gazette*, April 18 and 20, June 18, July 8 1788, March 11 and October 20 1789, November 16 1790, January 7 1791 and November 25, 1795. The first three advertising for the latter date were William Pickens, Thompson and Voth, Fletcher and Oliver, Joseph Rodde, and Dempsey, Harris and Company. Alexandria press: *Virginia Gazette and Winchester Advertiser*, August 20, September 7, 14, and 20 1787. Alexandria shipping: *Winchester Virginia Gazette*, September 14 and 20, October 20, November 4 and 18, December 2 1788, and January 20 1790. Postal service: *ibid*, March 10, April 10 and 20 1790. See also: Roberts, "Three Free Proposals," 64, 220-223, 227-231. Mitchell, *Commonwealth and Frontier*, 185-194, 220-229.

51 Place newshouse: *Foranck Charleston & Beckley Advertiser*, August 10 (R.T. Hunt) and September 10: 1792 (Thomas Venable, March 20, Joseph Radflet, October 20 (Thomas Fowler), December 21, 1793 (William Gouvenor) and December 20: 1797 (Joseph Dent). Retail newshouse: *ibid*, November 14 1793 (Johnston, Sanderson and Co.), May 3 (McIntire) and December 8 1796 (William Robinson) and November 2 1797 (Dempsey, Harris and Co.). See also *ibid*, August 13, 1792; February 20 1798, and June 20 1796. Abraham Shephard a Shepherdsware and and sundry ware and merchant, had close business ties with Alexandrians His second book regularly notes the calling of Bow for shipment "to Alexandria." He also had extensive business transactions with Joseph Wiggan, an Alexandria merchant who was an partner for Henry Seidinger, Roger Callari, and Joseph Watson. Abraham Shephard *Account Book*, 1790-1800 *Shephard Family Papers*, 1790-1802, Virginia Historical Society, Richmond, Virginia (acquired 1982). On Philadelphia's and Baltimore's

control of the export trade was, Rochester-made Lancaster *Trunks*. *Through the U.S.*, 188; *Toolbox*. *Waters*. *Domestic*, 52; Hobbes, "These Fine Foxgloves," 228-229.

62. *Coal*. *Yarn of the U.S.*, 201; Mary Catherine Fennell, "Artisans of the South: A Comparative Study of Norfolk, Oberlin, and Alexandria 1780-1860," Ph.D. Dissertation, The College of William and Mary, 1999, 24-25.

63. The numbers in the text and in figures 2-3 and 3-4 are based on the 1868 Census of Alexandria, Virginia, reprinted in Miller, *Alexandria and Maryland*, 2: 320-350. In relation to the manufacturing trades cited in the text there were forty-five mechanics employed in luxury crafts (jewelersmiths, printers, etc.), thirty-one in metal trades (blacksmiths, tanners, etc.), and eighteen employed in miscellaneous trades. In *Industry and Enterprise* I terms the grain and livestock-raising and transporting industries were "elemental" or "city farming," while the other trades (along with commercial and professional occupations) were "manufacturing" or "city living," see "The Conception of Cities," 118-130. The growing manufacturing population was also reflected in the town's very emotional life. In May 1798 artisans formed the Mechanical Relief Society of Alexandria, and they made up the bulk of the membership of the Friendly Fire Company, one of three fire companies formed in the town in 1798. The mechanics, indeed, also became an important force in the political life of the town, providing by the late 1790s the primary support for Thomas Jefferson and the Republican party in an otherwise Federalist town. See *Columbian Mirror and Alexandria Gazette*, August 1, 1798 (Mechanical Relief Society); February 18, 1798 (Fire Companies); and *Alexandria Advertiser*, May 8, 7, 8, 1798; *Times*, and *Barrett of Columbia Daily Advertiser*, May 3, 1800; *Columbian Mirror and Alexandria Gazette*, October 13, 1800 (political activity). See also Ferriss, "Artisans of the South," 187-208. On the support of artisans for Jefferson and the Republican party elsewhere, see Nelson, *Liberty and Progress*, 81-82; Steve Wilson, *Change Incorporated*, New York City and the Rise of the American Working Class, 138-1408 (New York: Oxford University Press, 2004), 68-71, 100-102; Charles G. Beitzler, *The Mechanics of Baltimore: Workers and Politics in the Age of Revolution, 1782-1813* (Baltimore: University of Illinois Press, 1986), 173-180, 229-231; Paul G. Foner, *Mechanics and Manufacturing in the Early Industrial Revolution, Lynn, Massachusetts, 1780-1860* (Baltimore: State University of New York Press, 1961), 35-40; and Bruce Levine, *Working People of Philadelphia, 1800-1850* (Philadelphia: Temple University Press, 1988), 138-139.

54. According to Morse, *American Gazetteers*, unpaginated, the town was located between miles from Alexandria and sixty four from Winchester. Merchants and citizens: Bradford " Loudoun County," 20-22. November 22 1760 (January, November 17 1770 selected months) and December 2 1770 (Loudoun academy); Loudoun County Legislature: *Pequotas, LCN*, for the legislative session for *Henric Statutes at Large*, 12: 400 (Shepherd, *Statutes at Large*, 1: 422-424, and 2: 224-225). Patrick McIntyre established the *True American*, a weekly newspaper, in 1776; the only surviving issue, December 30, 1800, records that it was the 130th number. See also, Williams, *Legends of Loudoun*, 142.

55. *Ibid.*, 140-150 quotes 1800 Bradford, "Loudoun County," 20-22. See also E. Swenson, *Life in Black and White: Family and Community in the Slave South* (New York: Oxford University Press, 1966): 24-25. *True American*, December 30 1800. On the population of Loudoun see: Morse, *American Gazetteers*, unpaginated; Joseph Scott, *United States Gazetteer*, unpaginated; *Brooks, General Gazetteer*, 220; and Worcester, *Gazetteer of the United States*, unpaginated. In 1800 Morse, *Comprehensive Gazetteer*, 212, reported that over thirty five massive settlements in western Virginia trades made Loudoun home.

56. As in the lower valley the production of grain also spurred the raising of livestock. In 1760 Loudoun County had 22,887 cattle or over four cattle per white taxable, and Fairfax had 8,748 cattle or nearly one cattle per white taxable, see, Schenker-Yates and Levin, *LCST Current*, 1: 22-23, 2: 200-207b.

57. Barrow, "Creation of Capitalism," 24-26, see also Eric H. Hobsbawm, *America, European Africa: The Development of U.S. Cities and Towns, 1760-1860* (Berkeley: University of California Press, 1966): 5 who argues that urban growth in the United States has been "vastly decentralized." On the rise of concerns and a new spirit of invention and investment in post Revolutionary America see John Martin, "The Great Revolution at Court versus Country: A Comparison of the Revolutionary Settlements in England (1688-1721) and America (1776-1844)," in *Three British Revolutions*, J.O.A. Pocock, ed. (Cambridge: Princeton University Press, 1969), 424-440.

58. *Henric Statutes at Large*, 8: 622; Harrison, *Old Prince William*, 1: 147-148; Charles Keyser, *Light House Harry Lee and the Legacy of the American Revolution* (New York: Alfred A. Knopf, 1962): 71. On the phenomenon of speculative towns, usually associated with the nineteenth century railroad, see Mahoney, *Early Towns*, 104-105, and Hobsbawm, *American Expansion*, 71, 73-74, 125-126, 242-243.

50 Henry Lee to James Madison, October 29–November 18, 1795; September 8, 1795, Madison Papers, LC. Lee to Madison, March 4, 1796; Henry, Lee Papers, 1794–1816. LÖV (quote) Madison to George Washington, November 5, 1794, and Madison to Lee, January 1795; Gailford Hunt, ed., *The Founders of James Madison*, 3 Volumes (New York: O.P. Putnam's Sons, 1900–1916), 1: 303, 323–324 (quote) Madison to Lee, December 18, 1791; *ibid.*, 4: 46–48, and *Hening: Statutes at Large*, 35: 171, October 26, 1792; *London County Legislative Minutes*, LÖV. Lee did not sign this petition (183) where still, but he attached his name to the notice summoning it on; *Columbiana, Mirror*, and *Alexandria Gazette*, December 23, 1798. See also *Recorder*, Leg. 71–75, 103–104, and Thomas Lloyd Lightfoot, *Henry Lee* (New York: Charles Scribner's Sons, 1913), 170–182, 248–189, 192–194.

51 In addition to works cited in note 50 are: Arthur G. Raper, *History of the Potomac Canal*, Middletown (Williamsburg, VA: Riverside Historical Store, 1936, 50–54, Bedford "London County," 189–190; Agreement between Henry Lee and the Potomack Company (1798), *Records of the Potomac Company Proceedings 1795–1807* National Parks Service, Record Group 78–N4, Lee to Madison, June 10, 1790, Madison Papers, LC (quote); Lee had written to Thomas Jefferson, then residing in France, seeking attention to his land, and Jefferson had approached both European and American aid. Lee to Madison, March 4, 1790, Henry Lee Papers, 1795–1816, LÖV, and *Gouverneur Morris: A Diary of the French Revolution*, 3 Volumes, Boston: Copy Department, ed. (Boston: Houghton Mifflin Company, 1929), 3: 48–50, 71–73.

52 *Columbiana, Mirror*, and *Alexandria Gazette*, May 18, and August 1, 1798; Raper, *Middletown*, 57–58, and Jan Harris and Linda Riggle "Middletown: Virginia's 'An Enslaved Town on the Potomac,'" *Virginia Geographic*, 14 (Spring/Summer 1994): 37 (excerpt); *Shepherd, Statutes at Large*, 1: 343–344 (excerpt). No petition survives requesting the creation of the Middletown Company. However, a notice of the petition was placed in the *Columbiana, Mirror*, and *Alexandria Gazette*, July 21, 1798. See also *ibid.*, February 23, 1798 (excerpt; book open) and November 29, 1798 (excerpt; still on table). See also Chapter 4.

53 Henry Lee to the Trustees of the Town of Middletown, March 25, 1797, Lee Family Papers at Milledgeville, 1800–1809 (Frances Lightfoot Lee buys cotton lots, no date); Alderman Library, University of Virginia, Charlottesville, Virginia, December 1794, *London County Deed Book V*, 1797–1798, LÖV, 1–30 (John Lee's buys cotton lots, July 9, 1795); 208–241 (George Gilpin buys one lot, July 9, 1795) and 13 (John Nicholson sells George Fells tract to James Barry Nicholson allegedly bought the tract with Robert Morris and James Greenleaf on September 18, 1794); *Frederick County Deed Book A*, No. 3, LÖV, 494–504 (Roger West buys two lots, July 9, 1795).

Putnam County Deed Book E, No. 3, 1885-1888, LOV John Foster vol. 1, 12 acres of land at Great Falls to Fredmonds Putnam. He originally purchased the land September 4, 1794, Barnes, Middletown, 24-74, 96-147 Joseph Gilpin owned on Mary three years later, and William W. Williams taxed as head. The Putnam Company also owned an unspecified number of town lots. George Gilpin, Lewis Morris Nicholson, Gwendolff Potts and West were a E Putnam Company investors at some time, see, Appendix 2 and Records of the Putnam Company Records Concerning Transfers of Shares of Stock, 1791-1838 National Parks Service Record Group 75, 5A.

63 Meeting of the Directors, January 14, 1797, Records of the Putnam Company, Proceedings, 1792-1799 National Parks Service Record Group 75, 5A (some issues are null, company issues, and listed) Frederick Laflin to the Directors of the Putnam Company August 1, 1797 Records of the Putnam Company Correspondence and Reports, 1793-1811 National Parks Service Record Group 75, 5A (some issues), *Columbian Mirror and Alexandrian Gazette*, August 22, 1798 (Gilpin's letter), John Foster, who visited the town in 1800 described it as a "sprawled, loose" with studios situated to it, by way of an inn", see, Richard Bock Davis ed., *Affluence America: Notes on the United States of America Collected in the Years 1804-7 and 1812* by Sir Augustus John Foster, Bart., San Marino, CA, Huntington Library, 1946, 126-127. See also Barnes, Middletown, 28-29, House and Single, "Middletown," 28, and Davis, Foster, Foster, Early Chapters in the Development of the Putnam House in the West (Washington, D.C., Columbia Historical Society, 1913), 47.

64 Lee to Madison, March 4, 1790, Henry Lee Papers, 1769-1844, LOV *Columbian Mirror and Alexandrian Gazette*, March 7, 1797 and August 1, 1798 (John Foster) and *Edmund Curran & Berkeley Advertiser*, March 20, 1798 (Folger Lee).

65 *Massachusetts Dialect*, was printed John Deane *Travels of Four Years and a Half in the United States of America During 1795, 1796, 1801, and 1802* A.J. Morrison ed. (New York: Henry Holt and Company, originally published, 1808), 371. William Parker Cutler and John Parkman Cutler, *Life, Journals and Correspondence of Beverly Massachus Cutler, LL.D.* 3 Volumes (Cambridge: Folio Clark & Co., 1881), 2, 42, see also *Sketches of E. Parker, from and of Under Their Vine and Fig Tree*, *Travels through America in 1795, 1796, 1805, with Some Further Account of Life in New Jersey*, by Julius Ursyn Sinigaglia, Volume 14 in the *Collections of the New Jersey Historical Society* (Elizabeth, NJ: Grassman Publishing Inc., 1949), 54. Morrison described Middletown in 1790 as consisting of "one spruced tavern and three or four houses." Martin, *Campdenians*, *Gazetteer*, writing in 1835 fails to mention the village. For

number appears only of the town's history see: Barnes: *Windsorville*, 39-74-81; and Homan and Gage: "Windsorville," 53-55.

64. Columbus Morris and Alexandria Gentry, July 1, 1795; December 5, 1795. *London County Legislative Positions: LCV*, Shepherd, *Statutes at Large*, 3: 583-594, Bradford, "London County," 136-138; Williams: *Legends of Loudoun*, makes no mention of either town.

65. James D. Evans, "Lt. Col. Leven Powell," *William and Mary Quarterly*, 2nd Ser., 79 (April 1922), 121, Bradford, "London County," 137-138; Williams: *Legends of Loudoun*, 108; October 23, 1787. *London County Legislative Positions: LCV* (quoting) and *Statutes at Large*, 12: 808-809.

66. Leven Powell to Perry Powell, January 30, 1794, "The Leven Powell Correspondence," The John F. Bunch Historical Papers of Randolph, Merce, Collins, 7 (June 1908), 129 (quoting). On the town's lot owners see October 28, 1780, *London County Legislative Positions: LCV* (Jacob Steyer Adam Boon, Jacob Muddler, Jonathan Peyton Harrison, William Johnson, Charles Smith, Andrew Buffington, Thomas Chinn, Perry Powell) and various *London County Deed Books: LCV*: *Deed Book R*, 148-149 (John McFarland); *Deed Book T*, 32-332 (Leven Powell, Jr.); *Deed Book U*, 108-109 (Dempster Smith); *Deed Book V*, 86-908 (Joseph Bellin), 111-113 (Joseph Lee); 123-136 (James McNagle); *Deed Book W*, 294-299 (Joseph Hagan); and Bradford "Randolph County," 192, p. 84 (James Bellinon, Robert Dagg, Eliza Lucy, and Michael Lucy). On Windsorburg in 1805 see: Morris, *Dempster's Gazetteer*, 212-213. Morris also described the town's surrounding water: "a stream, two above 'Gistown' two milldams, two millraces, four ponds and wagon tracks: a clear market: a school master two tanners, three millmen, a mercantile master, and over eighteen fine mills close to the town.

67. December 18, 1800 and December 9, 1800. *London County Legislative Positions: LCV*, Shepherd, *Statutes at Large*, 2: 270-271, 454-456; Bradford, "London County," 145-146; Williams: *Legends of Loudoun*, 108-107; and Morris, *Dempster's Gazetteer*, 581, 616.

68. Moore, *American Gazetteer*, unpaginated; John Ferdinand Reiser, *Swyth: A Tale of the United States of America*, 2 Volumes (New York: New York Times and Arno Press, 1969; originally published: London, 1794), 2: 178.

71. *Weather Hoods at Mason's political services*. See, George Mason to Roger West, November 9, 1791, and Mason to Richard B. Johnston, November 18, 1791. Robert A. Rutland, ed., *The Papers of George Mason*, JTB&JTB, 3 Volumes (Chapel Hill: University of North Carolina Press, 1970) 3: 1244-1246, and Henry Stoughton, at Large, 13: 263-264. See also *Spencer Collection*, 88-89. There is evidence of poor management at Mason's ferry. In April 1790, while crossing the Occoquan on the ferry boat of George Washington's house fell into the river and nearly drowned due to "the neglect of the person who stood before them"; see, John C. Fitzpatrick, ed., *The Diaries of George Washington, 1789-1791*, 4 Volumes (Boston: Houghton Mifflin Company, 1924) 4: 304 (April 7, 1790).

72. Mason to Johnston, November 18, 1790. *Mason Papers*, 3: 1246. On Thomas Mason's acquisition of the ferry see, George Mason, Last Will and Testament, March 26, 1773, in *ibid.*, 1: 154-155. *Colchester, Maryland and Alexandria, District*, May 16, 1798 (Ellison and McPherson) *ibid.*, July 7, 1798, and November 24, 1798. *Frederick County Legislative Proceedings, 1775-1806*, LGV (Thomas Mason) *Shepherd Statistical Large*, 1: 429-430.

73. *Spencer Collection* packet, *Three Records of Free Towns*, 281-282 (quote) *Alexandria Daily Advertiser*, August 19, 1800 (will report); *Shepherd Statistical Large*, 3: 304-305 (ferry improving); *Alexandria Advertiser and Commercial Intelligence*, October 3, 1800 (petition for incorporation); *Shepherd Statistical Large*, 3: 48-49 (Occoquan incorporated).

74. *Alexandria Daily Advertiser*, August 19 (anonymous "Commencement"); September 4 ("On of the Commencement"); September 14 (anonymous "Commencement"); December 16, and December 16, 1800 (last quote). See also *Spencer Collection*, 284-285.

75. November 28, 1798. *Frederick County Legislative Proceedings*, LGV. October 4, 1798.  *Loudoun County Legislative Proceedings*, LGV. *Henry Stoughton at Large*, 13: 260-261. *Yankee Chronicle and Alexandria Advertiser*, July 12, 1793. The 1798 number-petition of Adams and Lane does not survive, nor does the 1799 petition seeking the town's incorporation. Both petitions, however, are described in the 1798 report for incorporation.

76. Laurence M. Mitchell, "Old Mills in the Centerville Area," *Historical Society of Fairfax County, Virginia, Inc. Yearbook* 4 (1956-1959) 23-27, December 4, 1791. *Loudoun County Legislative Proceedings*, LGV (quote) Mitchell, "The Centerville Community-1730-1840" *ibid.*, 4 (1958), 41-49, and Eugene B. Smith, *Centerville, Virginia, Its History and Architecture* (Fairfax, VA: Fairfax County Board of Supervisors, 1971) 22-25. Bradford, "Loudoun County" 150-155.

71. See Chapter 4 for further details on the debate over the route of the Fairfax and Loudoun and Little River Turnpikes.

72. Albert Ogden Foster, *County Government in Virginia: A Legislative History, 1800-1904* (New York: Columbia University Press, 1907), 150-160; Harrison, *Old Frons-William*, 1: 376; December 8, 1760, Loudoun County Legislative Petitions (Concordville); December 8, 1760, Loudoun County Legislative Petitions, LGV (Red House).

73. December 14, 1760, Loudoun County Legislative Petitions, and December 30, 1760, Fairfax County Legislative Petitions, LGV (Shepherd Station at Large), 2: 342-343.

74. Times, and District of Columbia Daily Advertiser, September 6, 18, and 20, 1804; Shepherd Station at Large, 2: 170-168 (Hammaker incorporated); 402-403 (thereafter court moved to Farmersford). See also Broadhead, "Loudoun County," 184-186, and Smith, *Concordville*, 46.

75. Moore, *Comprehensive Statistics*, 168.

76. December 18, 1764, Fairfax County Legislative Petitions, LGV (South River); *Columbian Mirror and Alexandria Gazette*, September 4, 1766 (Fairfaxville); Shepherd Station at Large, 2: 171-173. The Falls Bridge across the Potomac was completed by the Georgetown Potomac Bridge Company in 1797. In 1798 the company issued 400 shares valued at \$100 each. Georgetown merchants eager to capture some of Alexandria's trade with the valley supported the project. Though never the success its builders envisioned (the bridge collapsed in 1804), it did arouse some opposition among Alexandria merchants who worried that Georgetown would be "rendered more accessible than Alexandria to the inhabitants of Loudoun." See *Columbian Mirror and Alexandria Advertiser*, June 3, 1798 (subscription book opened June 15, and August 12, 1797; bridge opened August 1); *Alexandria Advertiser*, September 5, and December 20, 1797 (quoting) and Robert L. Taylor, "The History of the Potomac Bridges at the Washington Area," *Antiquarian Historical Magazine*, 1 (October 1907), 43-44.

77. Memo to Zachariah Johnston, October 29, 1760, *Masson Papers*, 2: 1170-1180; November 1, 1760 (private court), and November 14, 1760 (court at Alexandria); Fairfax County Legislative Petitions, LGV, Henry Statutes at Large, 75-79.

78. County commissioners quoted in Harrison, *Old Frons-William*, 1: 324-325; Memo to Johnston, November 3, 1760, *Masson Papers*, 2: 1180-1182; November 11, 1760 (private court), and November 13, 1760 (court at Alexandria); Fairfax County Legislative Petitions, LGV.

65. *Shepherd Statistics at Large*, 2: 187-188. Harrods, *Old Front Village*, 126-128, and New Nicholson, *Franklin County*, 219-220.

66. *Ibid.*, 219-220; Harrods, *Old Front Village*, 128. December 21 and December 28, 1854. *Franklin County Legislative Minutes*, 1479, *Shepherd Statistics at Large*, 2: 177-178. *Western Commonwealth Gazetteer*, 1852.

67. One other exceptional town in the region was Harper's Ferry which developed in response to the federal government's decision to locate its armory there; see Marvin Ross Smith, *Harper's Ferry Armory and the New Technology: The Challenge of Change* (Ithaca: Cornell University Press, 1977), 24-25.

CHAPTER 8  
AN "ESTABLISHMENT PRODUCTIVE OF INCALCULABLE BENEFITS":  
BANKS AND ECONOMIC DEVELOPMENT

The creation of new towns and manufacturing enterprises, the construction of new roads, and the clearing of areas contributed enormously to northern Virginia's economic growth after 1780, fostering a growing commercial economy. By the late 1780s, however, many local residents believed that the regional economy, unable after independence to access English credit, lacked sufficient capital to finance existing ventures and development projects. Moreover, many argued that the local economy possessed an inadequate circulating medium to facilitate trade. As a result, growing numbers of northern Virginians became convinced that the region needed a bank. As one group of petitioners noted in 1788, "the experience of Commercial nations for several Ages has fully evinced, that well regulated Banks are useful for Society." "A Bank is . . . Absolute" they argued, would expand "the Medium of Trade" and "increase the Commerce" of the town. Thus, after 1780 banking advocates enthusiastically established a growing number of financial institutions that stimulated regional economic development by providing a medium of exchange and expanding access to bank capital. In their view, one-time of these

institutions, northern Virginians revivified upon the depth of their desire to exploit the opportunities furnished by independence and their embrace of a commercial economy.<sup>2</sup>

While bank supporters in Alexandria had few doubts about the efficacy of banking institutions, businessmen and economists divided over the role of financial institutions in facilitating economic growth. Some scholars, notably Donald Adams and Hugh Rockoff, argue that banks played only a secondary role in economic growth in the early republic. Financial institutions, they contend, appeared only after the economy had begun to develop, and when organized followed conservative banking practices that provided and institutionalized commercial operations at the expense of more capital-intensive and uncertain manufacturing and transportation projects. Early American banks, then, reflected the nature of the commercial economy in which they operated. Their credit institutions were shaped by "distortions in foreign trade," such historians conclude, leaving the banks "more the playthings than the manipulators of external economic forces."<sup>3</sup>

In contrast, a growing number of historians argue that banks played a central role in transforming the American economy after 1780. Early commercial banks printed bank notes, which could be redeemed for specie from the bank's capital stock. In the 1780s such bank notes circulated widely along with state issuance of paper money. When the United States Constitution prohibited states from printing money in 1790, private notes

became indispensable. They circulated as money and provided a necessary means of exchange. More important, scholars such as Edwin Perkins argue by the early nineteenth century commercial banks furnished large amounts of capital to agriculture, transportation enterprises, and industrial ventures. When state legislatures began passing more bank charters in the 1780s and early nineteenth century, the supply of credit rose accordingly. The new banks, operating within an increasingly competitive environment, were forced to meet recommendations, long-term loans which could be returned indefinitely. Thus, in contrast to the earlier banks which had provided only short-term advances of thirty or sixty days to well-connected merchants, the banks of the early nineteenth century turned credit to larger numbers of Americans. As Paul Gilje notes, banking and access to credit was "democratized" in the early nineteenth century, providing the "driving engine of the American economy."<sup>47</sup>

Oddly, however, even those scholars who see banks as crucial to American economic development fail to apply their insights to the American South. The reason is not hard to discover. Historians of the South have repeatedly emphasized the underdevelopment of the region's agricultural economy. The overwhelmingly agrarian nature of the South, they contend, resulted either in outright opposition to banks (particularly in the 1790s) or in banks that failed to spur economic development and instead reinforced the existing slave economy.

Many politically astute Virginians clearly deplored Alexander Hamilton's financial programs in the early 1790s, leading the opposition against him. The subsequent Republican faction led by Thomas Jefferson and James Madison opposed Hamilton's policies—funding the national debt at face value, federal assumption of state debts, and chartering the Bank of the United States—for both practical and philosophical reasons. Though government funding of the debt as per promised to raise dramatically the value of government securities, few Virginians owned government securities. Similarly, federal assumption of state debts promised Virginia little: during the 1780s the state had paid off most of its war-time liabilities. More sustained than such practical objections, however, were the philosophical protests. Virginia planners such as John Taylor, George Mason, and Richard Henry Lee argued that Hamilton's program presented a windfall to the "paper interest" speculators and "stockholders"—who held government securities and bought shares in the Bank of the United States. Interest paid on the debt and dividends paid on bank shares constituted a transfer of wealth, through loans and value drains, from the nation's "true citizens"—farmers and planters—to a financial "aristocracy." Federal tax policy created an "artificial interest" of speculators who "subsisted upon the national labor." Moreover, it subverted the chief end of republican government—the "national good"—by turning government at its core little more than a "prostitute of faction," the tool of an "exclusive interest."<sup>12</sup>

Though some southern (and northern) Democrats made comparable complaints about banking and financial institutions throughout the antebellum period, increasing numbers of Southerners recognized the advantages—indeed the necessity—of banks after 1790. Still, historians of the South agree: the banks they created failed to play the same role in economic development as those in the North. Eugene Genovese, for example, argues that the planters who controlled the banks sought not for enterprises which were “economically feasible and socially acceptable” in a slave society. Thus, southern banks printed money to facilitate “the movement of capital and loaned capital to planters for ‘the purchase of land and slaves.’” As “auxiliaries” of the planting class, southern bankers offered credit to friends and extended family, leaving transportation and industrial enterprises which might have generated economic diversification undercapitalized. In short, the “rapid extension of state banks” in the South “can be understood as effects of the expansion of the slave accumulation process.”<sup>26</sup>

However, in northern Virginia, where slave labor remained an integral part of its agrarian economy, merchants and planters campaigned actively for local financial institutions that encouraged regional economic development. In doing so, they did not follow the example of the slave economy, but rather the example of northern towns and cities. Throughout the nation's commercial centers banks predominated in the late eighteenth and early nineteenth century. Congress chartered the first commercial

bank in the United States, the Bank of North America, in 1781 as a war-time emergency measure. By 1793 (the year the Bank of Alexandria began operations) twenty chartered banks had been established. Nine years later Noah Webster catalogued thirty-three. Thereafter, the number of banks exploded. William Goetz recorded 122 banks in 1823, and in 1837 Albert Gallatin, formerly Jefferson's Secretary of Treasury, estimated that there were 320.<sup>2</sup>

Still, if banks eventually gained the [confident] acceptance of most Americans, it was only after a lengthy period of anxiety and often bitter debate.<sup>3</sup> Indeed, the first chartered bank in the United States, the Bank of North America, located in Philadelphia, became a lightning rod for arguments both for and against banks. The debate over the BNA would resurface in Virginia (and elsewhere) throughout the 1790s.

The bank was a product of Robert Morris's plan to stabilize the economy and restore the public credit of the United States government. Morris, the Superintendent of Finance, proposed that Congress charter a private bank to hold government funds, make loans to government (including it to and currency financing) and provide individuals, and issue bank notes that would become the nation's circulating medium. Private creditors who purchased bank stock with specie (at \$400 per share) supplied the capital of the bank. Thus, though private in nature the bank would serve both public and private functions. As Morris concluded, the bank would help the

interests of "many powerful individuals to the ruin of our country by the strong principle . . . of private interest."<sup>41</sup>

Struggling through a fiscal crisis in 1781, Congress quickly agreed to Murren's proposal. In 1783 Pennsylvania also incorporated the bank. However, within a few years it had generated a firestorm of criticism. The most formidable threat was posed by agrarians who opposed the bank's corporate status and its loan policies. Agrarian critics of the bank charged that corporate charters, which granted "peculiar privileges" to a segment of the society, were "incompatible to the spirit of America's republics." The unequal distribution of state-controlled capitalistic rights, critics charged, created an aristocratic presence within the republic, an elite over which the government would be able to exercise little effective control. The bank, then, was a monopoly which used a state-granted charter to march the firm at the expense of the many. And critics could point to the practical consequences of the BNA's policies to bolster their attack. By issuing only short-term loans to merchants, the bank denied farmers access to the long-term accommodation they needed to improve their lands. Meanwhile, easy credit issued to favored merchants induced many to "over trade their stocks" and bankrupt themselves. Finally, agrarians argued that the bank drew specie out of circulation. The bank, they charged, encouraged owners of specie to hoard it as bank notes, while at the same time it enabled the

Foreign owners of bank stock to draw specie out of the country in the form of *banknotes*.<sup>7</sup>

In September 1786 these arguments led the Pennsylvania legislature to repeal the Bank of North America's charter. Not until March 1787 would the Pennsylvania assembly restore the act of incorporation. In the meantime, supporters of the bank fought vigorously on its behalf, making arguments that would be repeated throughout the nation—and, in a few years, in Alexandria. Banks, promoters of the BNA, argued, offered many advantages to both the mercantile community and the population at large. First, they facilitated commercial transactions by providing a circulating medium whose value did not depreciate. As many observers noted, the new nation lacked an adequate supply of specie to serve its commercial needs.<sup>8</sup> Private banks filled the void by printing bank notes which the holder could redeem for specie. The effect of prompt redemption, argued Politeness Webster, would be "that very few . . . people" would redeem their bank notes "between the hills . . . would purchase any kind of commodities and pay any kind of debts, as well as cash."<sup>9</sup> The "credit" of the institution would be established, and its notes would circulate as specie. Indeed, many people soon recognized that bank notes had additional advantages over hard money: being more counted, transported and less liable to theft.<sup>10</sup>

But banks did more than simply issue bank notes. As Adam Smith demonstrated, they could actually expand the money supply. When bank

notes passed like specie. Few of them, came back for redemption, asserted, the greater part "continue[d] to circulate for months and years together." As a result, banks could issue far more bank notes than their specie reserves. Lincoln estimated that the entire circulation of a bank could "be conducted with a fifth part only of the gold and silver which would otherwise have been requisite." Webster was more conservative, estimating that the stock of a "well regulated and managed" bank was "sufficient to support the issue of double or triple its amount in bank bills." In effect, "a good bank" increased "the circulating medium of a State" two to three times "the quantity of real cash without increasing the real money [specie]." As historian Bray Hammond has noted, the ability to create "a flexible, expansionist, and inexpensive substitute for lawful money" constituted the essence of the "banking function."<sup>11</sup>

But the "banking function" went still farther. The Bank of North America, as Thomas Donagan has argued, enabled Philadelphia's merchants to conduct numerous amounts of their business using universal paper (bills of exchange or promissory notes which matured in thirty to sixty days). These bills and notes circulated like cash because the bank accepted them in exchange for cash at a discount (that is, the bank charged a immediate fee—in effect, interest—for providing cash on demand). As a result, a merchant's notes could be quickly turned into cash and re-invested. In addition, merchants deposited their specie reserves in the

bank. Prior to the war every merchant needed to keep a reserve of specie on hand in order to meet sudden expenses or speculate on favourable opportunities. As French pointed out, such specie was "dead stock... producing nothing for the merchant or his country." Such resources deposited in a bank, however, could be advanced to other entrepreneurs who put it into production use. Moreover, the depositor was well guaranteed that his deposit would be available on demand. Thus, through various forms of lending—bank notes, commercial paper, and deposits—the bank expanded dramatically the productive capital of the economy.<sup>27</sup>

Some agrarian opponents of the bank conceded all these advantages but they still argued that banks were dangerous because the benefits went primarily to the merchant community. Polkiah Webster countered by noting that even if this were indeed true farmers had no reason to "repudiate the advantages" of banks because they "best the country nothing." More important, Webster contended that, in fact, banks aided farmers. "The richer the merchants are," he noted, "the greater their trade, [and] the better market they afford for the produce of the country." Better markets in the city, then, "increased and supported" the husbandry of the countryside. Or as Thomas Paine, another supporter of the BNA noted, the "attempt to destroy the Bank" will inevitably "thrurow the farmer as well as the merchant." If the merchant lacked "reasonable cash with which to purchase

the product of the country; the farmer, "in consequence, is deprived of the opportunity of selling"<sup>124</sup>

Finally, BNA leaders argued banks improved the moral character of the economy. According to Noah Webster, banks "enforced punctuality" in the payment of debts by creating a new source of money readily available to all. Debtors could obtain loans from the bank to meet their short-term obligations that might otherwise be paid by converting non-liquid assets such as property into specie. And banks had less fear of sudden payments possessed of the most reliable supply of short-term credit, banks had enormous economic "power with which to secure payment." Polkiah Webster added that banks encouraged habits of "economy and industry" by providing a safe and profitable "repository of cash." An individual saving money by depositing it in a bank or buying bank stock will be "very industrious, and his economy will be good, till he has made up his loss." Over time, Webster concluded, such habits would become ingrained "to the great advantage and strength of the State."<sup>125</sup>

As important as these arguments were to convincing Pennsylvanians—and Americans—of the valuable nature of banks, the best argument of all was the Bank of North America's profitability. The foundation of any successful bank was its capital, the accumulation of which required many "wasted" individuals to invest in bank stock. Here, the defenders of the bank had little need for exposure rhetoric. During the 1790s and 1780s all

the states set money rates at 6 per cent. In contrast, the stock of the Bank of North America paid 8 1/4 percent in 1792 and 14 percent in 1793 and 1794. Between 1793 and 1797, while the bank's Pennsylvania charter was renewed, its dividends fell to 5 percent per year, but by 1800 they had climbed back to 10-5 percent. For the rest of the 1790s the bank's dividends never dropped below 10 percent per annum.<sup>20</sup> These banks offered a lucrative opportunity for individuals seeking a profitable investment for their capital. Little wonder, then, that they proliferated in the 1790s and 1800s. In short order, merchants in New York City (1784), Boston (1786), and Baltimore (1789), and Providence (1791) established their own banks both to facilitate commerce and to afford a profitable investment.

It was in this context that the merchants of Alexandria launched their efforts to establish a local bank. Many of the leading merchants of the town who had commercial connections with Philadelphia requested a familiarity with the operations and advantages of the Bank of North America. Merchant James Hunter explored the possibility of getting a branch of the BNA in Virginia, but ran into a wall of opposition. Other merchants had more direct contact. At least one firm, William Wilson and Company, actually used the bank to raise money in 1792. Finding himself short of cash while loading two ships bound from Alexandria to the West Indies, Wilson requested that his Philadelphia agent present his discount to the bank, \$5,000 worth of securities, and to transmit the proceeds to

Alexandria. Other Alexandria firms such as Hogg and Harrison who did regular business with Philadelphia merchants must have also become familiar with the operations of the bank. Not surprisingly, both these merchants signed the petition requesting the incorporation of the Bank of Alexandria in 1792 and were elected directors in 1793.<sup>17</sup>

The town's leading merchants, most of whom were Federalists, also supported Hamilton's fiscal policy. In fact, they hoped to benefit directly from it. Soon after the incorporation of the Bank of the United States in March 1791, advertisements for the bank's stock appeared in the Alexandria newspaper. But bank stock, however valuable, was not enough. In June a group of the town's leading merchants forwarded a petition, along with a list of 8000 stock subscribers from the region, to the president and directors of the bank requesting that a branch be opened in Alexandria. John Fitzgibbon, a leading merchant, followed the formal request with a personal appeal to Hamilton. Fitzgibbon-John Hamilton had served as an aide de camp to George Washington during the Revolutionary War, and he sought to capitalize on his war-time association to forward Alexandria interests. He depicted a town on the verge of commercial greatness, pointing to the "importance of Alexandria's growing trade and the 'very great numbers of subscribers' to the town in the past twelve months. Above all, however, Fitzgibbon stressed the region's potential. The trade of Alexandria could

cally man, he concluded, because "no town in the United States has a more extensive and fertile back country for its support."<sup>18</sup>

When these efforts received no response, the inhabitants of Alexandria renewed their application in December. With Fitzgibbon appointed chairman, "the Merchants and other citizens" of the town met to present "a full statement of the Trade of the Potomack," and "the advantages and support the Bank would derive from other Towns contiguous to Alexandria." The petitioners hoped that such information would "dissuade the idea" that the trade of the region was too meager to justify a branch of the bank. Unfortunately for Alexandria's bank hopes they faced competition from Norfolk and Richmond. Inhabitants of both ports composed lengthy petitions setting forth the advantages of their respective towns. In this contest, Norfolk proved the eventual winner: in 1780 the directors of the BUS authorized the establishment of a branch bank in that town. As a consolation Philip Richard Pendell, one of the leaders in the drive to bring a branch to Alexandria, was elected the only Virginian director of the BUS in early 1782.<sup>19</sup>

But the campaign for a bank would not be killed so easily. Frustrated in their attempt to obtain a branch of the BUS, the merchants and inhabitants of Alexandria turned to the Virginia legislature. In August 1781 a small notice appeared in the local newspaper that a petition, requesting the establishment of a bank in Alexandria would be forwarded to

the next meeting of the state assembly – held in October and signed by 120 individuals – the petitioners repeated many of the same arguments made by northern defenders of banks. “Well regulated banks” the petitioners declared “promoted ‘promptness in the performance of Contracts’ stimulated the ‘Medium of Trade’ aided the payment of taxes – prevented the ‘expatriation of Species’ and furnished for it ‘a safe deposit,’ and ‘by discount, rendering easy and expeditious the circulation of funds on reasonable interest.’”<sup>107</sup>

But the necessity of a bank went beyond such funding concerns. Alexandria needed a bank immediately, the petitioners declared, in order to compete with its commercial rivals to the north. Many farmers in the “Western Country” who formerly looked to Alexandria as their market were sending their produce to Philadelphia and Baltimore because their merchants – simply supplied by local banks – could pay farmers cash. As a result, the “wealth which ought to center in this State, is directed from its natural course, and enriches the Neighbouring States.” A bank, then, was a matter of economic survival. To secure the trade of the region for Virginia, the petitioners asked that the assembly pass an act of incorporation to establish a bank with a capital of \$150,000.<sup>108</sup>

In late 1792 – and despite significant opposition – the legislature passed an act incorporating the Bank of Alexandria. The primary defender of the bank was the region’s representative Richard Brent. Three years later United

States Senator John Pope of Kentucky noted that Virginia's "a few years since" were "designated as the very name of a bank." Indeed, continued Pope, "it required all the eloquence" of Bristol "to persuade the Legislature that the little Bank of Alexandria would not sweep away their liberties." Perhaps equally important as the passage of the legislation were BUS opponents. Many republicans believed that chartering a state bank, even one run by Federalists, would prevent the creation of a federal branch in Virginia. As John Devine noted in Madison in 1791, many who "had always repudiated the national Bank, and the principle of banking" supported the Alexandria bank.<sup>19</sup>

The charter was modeled after those of the northern banks. In effect until 1800, it provided for a capital stock of \$100,000 divided into 750 shares worth \$100 each. Though subscribers were required to pay only \$40 down, the charter stipulated that the whole amount must be paid within 100 days of the election of directors or the subscriber forfeited both the share and the amount paid. Each year, the stockholders would elect nine unpaid directors who then would choose one of their number as president. Likewise, the directors chose the cashier and all other bank officers. Perhaps most important, the charter explicitly acknowledged that shareholders and directors were liable for the corporation's debts only to the extent of their investments, except when the liabilities of the bank exceeded their own the amount of the capital stock. The charter also awarded the

bank a surprising degree of legal power. In order that debts may be punctually paid" the charter empowered the bank to bring suit in the local court against anyone indebted to it. If the defendant failed to appear the court rendered a default judgment against them, from which there was no appeal.

Equally surprising in light of the widespread suspicion of financial institutions in Virginia, the charter imposed few regulations on the bank. For example, though the charter prohibited the bank from purchasing land beyond its immediate needs or public securities for investment purposes, it did permit the bank to accept both to satisfy outstanding debts. Likewise, the bank could accept public securities as collateral for discounts or loans. In addition, at their quarterly meetings the directors were required to examine the bank's books, and each year the auditor was directed to send the bank's financial statement to the governor. The charter also set the discount rate (8 percent) stipulated that dividends be paid to stockholders every six months, and prohibited the bank from issuing notes less than \$5 in value.<sup>47</sup>

Shares for the bank went on sale in Alexandria on December 7, 1792 and were to be sold until the stockholders elected the directors to take place after 150 shares had been subscribed. However, the town's inhabitants displayed a remarkable enthusiasm for the bank. In "less than two hours," the local newspaper reported, all the shares had been

submitted and "many persons . . . who were desirous of becoming stockholders were disappointed." Moving quickly on January 11, 1793 the stockholders elected nine directors, all of whom were prominent merchants in the town. The next day the directors elected Fendall president of the bank and appointed Fitzgerald to fill his vacancy on the board of directors. In early February the board appointed Gordon Chapin cashier and in late March announced that the bank would begin discounting on April 9. When it opened its doors the bank possessed paid-in stock amounting to \$80,700 by May 31 Chapin had collected the entire capital.<sup>19</sup>

By most measurements the bank was highly successful. The notes of the bank, for example, gained ready acceptance. As one traveler noted, the notes of the bank "are current throughout all Virginia, at George Town and even for the most part in Maryland." In 1808 it was reported that the notes circulated in Virginia, Maryland, and "throughout the United States." This may have been a result of the fact that the directors of the bank derived from the advice of northern merchants who argued that banks could seven double or triple their capital increases in notes. Partly in placate opponents, Alexandria's bank directors behaved in a conservative fashion. While the bank's capital remained \$100,000 the notes in circulation never exceeded \$100,000 50¢. More striking, after the capital of the bank was raised to \$180,000 in 1794 the note circulation never exceeded the paid-in capital, peaking at \$400,000 in 1802. Such a low note to capital ratio

meant that the bank's notes retained their value and currency. Indeed, by the late 1790s local merchants had begun to list Alexandria bank notes as one of their preferred forms of payment for goods.<sup>10</sup>

By another measure—dividends paid to stockholders—the Bank of Alexandria was an even greater success. Every six months the cashier Chapuis publicly announced the dividend to be paid to stockholders. Though little information on profits survives for the bank's first two years of operation, between 1795 and 1805 bank stocks never paid less than 8 percent per year. Indeed, the average over these eleven years was 9.68 percent. In 1810 a congressional commission reported that the bank had paid dividends averaging 8.75 percent on its capital each year since its inception. Both these figures were well above the 5 percent ceiling for set by the state. Consequently, the value of bank stock was ever above par, particularly in Washington (which just before a dividend was paid).<sup>11</sup>

Moreover, an active and organized market for bank stock soon appeared in the region. In November 1797 Alexandria's first "real broker," Henry Kline, announced that he had opened an office in town where he would buy, sell, and exchange "lands, houses, lots, vessels, bills of exchange, negotiable notes [and] bank stock." Bank stock made up an extensive portion of his business: within two days he offered "ready" for "70 or 80 Alexandria Bank Shares." The following year he was joined by John Leland who announced in March that he had opened a brokerage office

where he "purchased and sold Bank Stock, gave cash for notes or on good security, and advanced to trusted business — on Commission."<sup>1</sup> The business must have been lucrative, because in 1862 merchant William Grovesman offered "his services to the public as a Broker & in the Commission line." Soon, he was offering "the highest cash price" for bank shares.<sup>2</sup>

Equally notable is the fact that merchants and planters began to take bank shares as payment for goods and land — and that many actively sought to buy bank shares.<sup>3</sup> Some indication of the extensiveness of the trade in Alexandria bank shares can be gleaned from the few stock certificates which have survived. Between early 1862 and late 1863 Robert Drevorley purchased thirty-nine of the bank's shares from stockholders. On the reverse of each share the clerk, following bank policy, recorded all the previous owners and the date of their purchases. Significantly, seventeen of Drevorley's thirty-nine shares had, at least two previous owners; one share (1820) had been sold thirteen times. By 1863 the local market for bank shares had become organized enough for the Alexandria newspapers to report their prices. In January shares sold at \$100 per share, or \$68 shares per<sup>4</sup>

Just who became stockholders of the bank can never be known with complete certainty. However, in 1868 most shares were probably purchased by wealthy individuals, including planters. Washington, for example, owned

at his death twenty-five shares in the bank (worth \$5,000 at par). Beyond Washington it is difficult to know with certainty how many planters owned shares. However, some clue to their numbers can be gleaned from the fact that the directors believed it necessary to place bank announcements in the Berkeley County newspapers to notify residents of changes in policy.<sup>13</sup> In addition to planters, many "widows and orphans of former stockholders" held bank shares depending on the interest for their "present support and maintenance."<sup>14</sup> One writer even urged "young men" to serve as leaders because they "possess[ed] adventures a good interest," though it is unlikely many did.<sup>15</sup>

Still, surviving evidence indicates that the largest percentage of bank capital came from the town's merchants and professionals, who depended most heavily on the services the bank provided. Fully 60 percent of the previous owners of Robert Devall's shares were merchants or professionals working primarily in the town.<sup>16</sup> In addition, many merchants invested in the bank indirectly through corporations who purchased bank stock. In 1787 Jonathan Swift, the Alexandria representative of the Mutual Fire Insurance Company of Virginia, announced that all insurance premiums collected from Alexandria subscribers would be invested in the town's bank. The Marine Insurance Company of Alexandria eventually invested its entire capital in Alexandria bank shares, and the Relief Fire Company of Alexandria, a privately organized fire brigade, also invested in

the bank. Clearly a broad spectrum of subscribers of the region, whatever their species of banks, viewed the Bank of Alexandria's shares as a valuable investment. As attorney Charles Lee noted in 1797, bank stock "is the most desirable purchase."<sup>42</sup>

Beyond the stockholders the primary beneficiaries from the bank were those to whom it extended credit. Unfortunately, it is as difficult to determine who received discounts and loans as it is to discover who owned shares. Still, sufficient anecdotal evidence survives to indicate general patterns. Like most early commercial banks, the Bank of Alexandria loaned primarily to merchants, providing short-term loans of thirty days or less in foreign trade. Indeed, the initial bank regulations published in April 1788 mandated that "Bills and Notes" were not to run "over thirty days." With such measures loan programs little aid could be given to planters or manufacturers who needed longer term credit. Moreover, the directors of the bank loaned primarily to stockholders. For example, when the Governor of Virginia, Henry Lee, approached the directors of the bank for an advance to the state in 1784, they refused his request. "The pressing daily demands of the stockholders for loans," the bank directors replied, "made it impossible for them to extend the 'projected' loan."<sup>43</sup>

Still, even limited supplies of short-term capital had a ripple effect on the local economy. As Jay Hammond has argued, "credit released anywhere does not stop at the point of release." Instead, it "passes from one

grains to another "enrich[ing] the volume of trade to grow." In Alexandria this certainly seems to have occurred. In the wake of the British establishment, the flow of produce into the port was rapid. In 1762 60-800 barrels of flour were unexported at the port; three years later that figure had risen to 130,000 barrels. Farmers and planters throughout the region displayed a growing preference for Alexandria because its credit facilities facilitated the sale of their produce. As a correspondent in Berkeley County put it, trade such as the one in Alexandria was "a public good" because "EASES and husbandry." Planter J. F. Moore explained how in 1764 he decided to send his produce to Alexandria in preference to Frederickburg because at the Potomac port "the load may be returned into Cash more readily." Indeed, while the trade of Alexandria rose after the incorporation of its bank, the trade of its closest commercial rival, Georgetown, suffered, falling from \$214,444 in 1766 to \$126,534 in 1769. Seeing their town's decline relative to Alexandria, the merchants of Georgetown petitioned the Maryland assembly for a bank of their own in late 1769.<sup>10</sup>

Despite the economic benefits of the bank, its impact was counterbalanced by its limited capital. The directors' tight credit policies made sense in light of the bank's \$150,000 capital revenue, among the smallest in the nation in the early 1770s. As early as 1770 the directors realized the "inadequacy of the present stock" and requested that the state

double the bank's capital to \$300,000 and allow the bank to issue notes as small as \$1.<sup>27</sup> Receiving no response, in 1795 the directors renewed their request. This time, however, they sought to increase the bank's capital to \$500,000. While acknowledging that many arguments "might be urged against banking either from theory or practice," the petitioners contended that Alexandria remained "weak in capital," a situation which required "both the Merchant and Farmer." If the title of "an extensive bank country" was to take "its natural course" down the Potomac, and the farmers of the region to find a "ready and extensive market" at Alexandria, the capital of the bank must be enlarged. To reinforce the message that the bank provided aid to farmers, bank supporters from the surrounding counties furnished additional petitions.<sup>28</sup>

The legislature reacted favorably, noting that it was responding to the "general opinion" in favor of the bank in northern Virginia. The act authorized the directors to enlarge the bank's capital to \$500,000 by opening a subscription for an additional 1,750 shares. The new shares went on sale on January 21, 1796, and were to remain on sale for thirty days or "until the whole was subscribed." Though the shares initially sold quickly, two years later the bank's capital had increased only to \$338,000. Thus, of the 1,750 new shares only 641 had been purchased. Not until the Virginia assembly renewed the bank's charter in 1801 did all the shares sell. In July the directors offered the remaining 808 shares to the public for thirty days

700 shares sold on the first day. In January 1802 the cashier could report that the bank's paid up capital had reached \$200,000.<sup>17</sup>

With an enlarged capital the bank directors decided they could safely change the bank's lending practices. In May 1796 the directors announced that they would now discount for up to sixty days, and by 1797 the bank was discounting up to ninety days.<sup>18</sup> The increase in capital and the decision to grant longer loans enabled more groups and individuals within the region to have access to credit. The expanded credit can be best measured in the annual statements of the bank. For example, when the bank's capital had hit \$200,000 the bank had discounted \$322,847 in notes and bills of exchange. After the capital rose to more than \$300,000 the value of discounts rose to \$500,718, and by the time the full amount of the bank stock had been subscribed in 1802 the bank's discounts had climbed again to \$651,828. The bank injected this credit directly into the local economy to a variety of economic interests.<sup>19</sup>

At least some of the expanded credit went to various levels of government. From the commencement of the bank's operations the state of Virginia had made use of its facilities, both to cover the payment of debts and for advances on the bank. In 1794, for example, the bank charged \$18.54 to accept \$1,500 in German gold from the state (which "did not pass" in Virginia) in exchange for a bank note which would. The bank also loaned money to the commissioners of the city of Washington in 1795 to the

municipal government in 1893 and to the federal government after it moved to the District of Columbia. Indeed, during the War of 1912 the Bank of Alexandria advanced over \$300,000 to the federal government.<sup>42</sup>

The region's farmers and planters also benefited from the increase in the bank's credit supply. In addition to enhancing the ability of Alexandria's merchants to purchase farmer's products, the bank's more liberal lending policies and enlarged credit facilitated the selling and buying of land. By the late-1790s increasing numbers of sellers accepted "notes of the Bank of Alexandria" in exchange for their land. In 1797, for example, John Statton advertised "handley tracts of Land" in Hampshire County between 300 and 30 000 acres in size, for which he would accept "ten percent down" with the balance to be secured by "notes negotiable at the bank of Alexandria." Similarly, in 1804 Walter Jones offered to sell a 500 acre tract in Loudoun County "for cash, or if more convenient, for the purchaser for notes at 30 or 60 days negotiable in the bank of Alexandria."<sup>43</sup> The availability of bank credit enabled buyers of agricultural land to purchase extensive tracts of land on installment. Simultaneously, it furnished the seller with a reliable credit instrument, the collection of which was handled by the bank, granted the privilege of summary prosecution against defaulters. And the bank's supply of short term credit enabled it to apply economic pressure and compel payment where private individuals might fail. By 1808 ties between the bank and the region's farmers had

income so frequent that John Love, a northern Virginia representative in the House of Delegates, reported that over one-quarter of the bank's capital was invested in agricultural ventures.<sup>42</sup>

Finally, the bank provided capital to northern Virginia's manufacturing enterprises and internal improvement companies, playing a pivotal role in fostering regional economic development. Love, for example, asserted that the bank's capital was "indiscriminately used in various branches of manufactures and mechanical pursuits." Among the most important manufacturing recipients of the bank's capital, he continued, were textile establishments and sugar refineries—both of which received frequent long-term accommodations. In total, Love estimated that one-quarter of the bank's capital was tied up in "mechanical" enterprises.<sup>43</sup>

Of the region's internal improvement companies, the Potomac River Company was the primary recipient of the bank's funds, a not unexpected development in view of the close links between the management of the bank and the river project.<sup>44</sup> Indeed, the Alexandria bank, along with Georgetown's Bank of Columbia, provided credit to the Potomac Company at critical moments. In 1794, for example, the directors of the company reported to the stockholders that they had been forced "to take up money" at the Bank of Alexandria "to comply with our engagements." "Without these temporary aids," they continued, "the work must . . . have been discontinued." Similarly, the company sought an advance of \$10,000 in 1798

to supply "the immediate wants of the Company" and borrowed a similar amount in 1799. By 1802 the company was soliciting credit from District of Columbia banks on an annual basis. From the Bank of Alexandria alone the company requested a \$5,000 advance in 1802, an unrepaid loan in 1803, \$15,580 in 1804, and \$15,000 in 1805.<sup>18</sup>

The Little River Turnpike Company, which began building a turnpike road to the Shenandoah Valley in 1802, also received advances from the Bank of Alexandria. In 1804 the directors of the company decided to seek from the bank "such a Sum of Money as they may deem necessary for making the Turnpike road." At the annual meeting of stockholders held in November the directors noted that they owed the Bank of Alexandria \$4,340-50. Such lending became a regular feature of the company's financial operations. Between 1802 and 1817 treasurer Joseph Thompson reported that the company borrowed \$14,600 from area banks.<sup>19</sup>

Loans to internal improvement companies became, though they were not initially, long-term commitments when the debt became due. The bank directors simply turned it over for another sixty or ninety days. When the Potomac Company collapsed in 1795, for example, it owed \$121,600 to District of Columbia banks, more than half of which had been contracted between 1801 and 1805. Exactly how much money the Bank of Alexandria had lent up in long-term loans to the Potomac and Little River Companies can not be determined, but the amount must have been significant. A per-

bank petition to the Virginia legislature in 1808 reported that the bank had expended "vast sums" on the "Panama company" and other public works. These "various speculations," they stated, "had swallowed up the capital of the bank . . . [so] some time past, we left a surplus of say very inadequate to the object of purchasing country produce." In northern Virginia, then, planners interested only in capital for land and slaves did not control the banks. Instead, a significant portion of the banking capital was invested in projects designed to foster economic development, even if that resulted in a shortage of "agricultural capital."<sup>47</sup>

Nonetheless, the bank's loan practices and the question of access to credit, aroused considerable controversy in northern Virginia. The first sign of conflict appeared in the January 1798 election of bank directors. Prior to 1798 bank elections had been conducted quietly: the new management announced in the local newspaper after the stockholders had voted. In contrast, in the days preceding the 1798 election six different writers offered prospective claims of candidates to the local newspapers. At issue, the controversy concerned access to loans. According to one writer, the bank directors had practiced favoritism in their grants of credit. "[T]he present directors," he wrote, "are loudly complained of because some stockholders procure 'large accommodations at [the] Bank, whilst others holding an equal number of shares are not assisted with a single farthing, though they have frequently applied, & with unexceptional endorsements." The

directors' "partiality" had two causes. Lacking independence in "their circumstances" they were compelled to extend "many discounts" to "themselves, and their friends." Equally dangerous, they were not "independent" or "praiseworthy"; as that, "party" considerations motivated their loan policies. Federalists countered by complaining that those who proposed changes were "wicked in party," limited on benefiting themselves at the expense of the bank.<sup>40</sup>

In light of the deepening clash between Federalists and Republicans in the late 1790s—a dispute which dominated northern Virginia political life—it is not surprising that the Bank of Alexandria, an institution proposed and largely directed by Federalists, became a subject of political debate. However, local Republicans did not attack the bank on ideological grounds. They had more practical concerns. Rather than trying to close off the bank local Republicans attempted to gain greater control of the institution in order to require access to its capital resources.<sup>41</sup> As historian Elmore Landon has argued, "under trading" (providing accommodations to political allies and business associates) was a common practice in all of early America's banks. In 1798 northern Virginia's Republicans tried to increase their own access to the report's banking capital by electing political allies to the board of directors, becoming "wicked" themselves.<sup>42</sup>

Their efforts failed. The Federalist candidates collected the greater number in the 1798 election than those who proposed wholesale changes in

the bank's management. Of the nine directors elected on January 15 all but one was supported by Federalist supporters. The board meeting of January 18 completed the Federalist victory. The directors appointed William Barlow president and selected George Colyer as his replacement on the board. The entire Federalist ticket came out as directors, while only five persons on the Republican slate were chosen. Directors at the bank apparently fleeing a more lenient loan policy, avoided candidates who might weaken the bank's credit-worthiness. As one correspondent argued, most stockholders believed "the business of the Bank has been WELL conducted." "The liberal directors . . . about the management of the Bank," he concluded, "are happily selected, at least with the greater part of the community."<sup>1</sup>

For the moment he was right, but the "liberal directors" did not disappear entirely. In March "Mile" taking a page from John Taylor's work, contended that the bank was unconstitutional because it awarded "exclusive privileges" to a few "at the expense of the community." Most disturbing to Mile was the section of the bank's charter which granted it summary powers to collect debts, a right which no American citizen possessed.<sup>2</sup> Mile wrote with passion, but his work prompted no reaction, either pro or con. Bank supporters had merely tried to justify the bank as ideological grounds and did not begin to do so now. More important, the bank's detractors were beginning to discuss ideological attacks in preference

to progress, separate. Believed in their attempt to gain access to the bank's assets, and Bank forces contended that the bank had failed to generate sustained economic growth.

In 1799 they had an opportunity to argue their case. That year the directors petitioned the Virginia legislature to renew the bank's charter. Though the charter was not due to expire until 1803 the directors sought legal protection for the bank before Alexandria became part of the District of Columbia in 1800 and jurisdiction shifted to Congress. In their petition requesting a charter extension of twenty years, the directors emphasized the "Credit of the Bank" and the "great benefits which have resulted to the Commerce and Agriculture of the State" because of it.<sup>10</sup> Opponents responded in kind. Admitting that a "well constituted Bank" aided "the commerce" of port towns, "An Alexandria" argued that as presently run the bank was "rationally instrumental in producing an interruption of the growing prosperity of our town." In a counter-petition opponents of the bank's management asked that a new charter enlarge the number of directors to fifteen and stipulate that one-third of the board be ineligible for re-election each year. The petitioners explained that under its present administration "The Banks of the Bank have . . . become a monopoly to the Democrats and their friends, to the utter exclusion of many other useful and industrious Citizens." Ensuring a regular rotation of directors, the

petitioners argued "would 'prevent future abuses'" and "afford more generally the benefits of the bank."<sup>41</sup>

Without a unified voice on behalf of the bank, the measure to renew the charter failed by three votes in the Virginia legislature. But the bank directors were not about to give up so easily. The following year they forwarded another petition to the assembly requesting that the charter be extended for ten years. Once again, they emphasized the benefits of the bank both for the towns and the region's farmers. The petition also held out the hope of the Bank of the United States. The directors argued that if the charter of the Alexandria bank were not renewed, a branch of the BUS "will be established in Alexandria." Local residents, the petitioners argued, would exercise little control over the bank's bank because they did not elect the directors. Nor would the profits of the bank accrue locally; instead, they would "be enjoyed by the Citizens of other States & Foreigners" who owned BUS stock. Despite an initial rejection of this so-called bank proposal, the Virginia assembly eventually passed the measure by a slim majority of two, extending the bank's charter until March 4, 1811.<sup>42</sup>

With the charter secured, the bank's supporters publicly celebrated their victory and the directors requested the sale for the bank's nonsubscribed stocks. By mid-1811 the bank's capital stood at a full \$500,000 and the town's credit needs were temporarily satisfied.<sup>43</sup> Nonetheless within a few

years demands for an enlarged banking system were heard again. The character of the debate, however, had changed. Ideological opposition to banks largely disappeared, as did attacks on the management of the Bank of Alexandria. Instead those who lacked access to bank credit decided to establish their own institutions. This new approach reflected a growing acceptance of banks and banking. An increasing number of northern Virginians realized the key role banks played in economic development. They pushed for the creation of banks from which they could benefit. In effect, the region followed the example of the northern commercial centers and demonstrated access to banking capital. As Alexandria's *Republican* newspaper contended, when banks are few or possess "limited capitals" they become "dangerous organs of political or personal favour." In contrast, many banks with more "extensive capitals preclude monopoly or favoritism" and "greatly increase" the "active resources of the nation."<sup>11</sup>

The growth in pro-banking sentiment reached a critical mass in 1864. In January the *Republican* newspaper reprinted an article from Philadelphia which reported that of America's fifty-two banks only thirteen lay 'South of Philadelphia.' Having no explanations for these findings, the writer could only conclude by asking 'what is the relative operation, extent and effect of these remarkable 'facts'?' Northern Virginians must have asked themselves the same question, for by July two different campaigns were under way to establish new banks in Alexandria.<sup>12</sup>

In early 1864 the Virginia legislature incorporated the Bank of Virginia in Richmond with a capital of \$1.5 million. The charter also directed the bank's officers to establish branches of "discount and deposit" in Norfolk, Fredericksburg, and Petersburg.<sup>21</sup> The creation of the new bank was watched closely in Alexandria, particularly by Republicans. Local newspapers monitored the director of the bank and reported each stage in its organization. One correspondent even predicted (on credit to the chagrin of Alexandria's merchants) that Richmond's importance as a commercial center could only grow now that it had a bank. But while some of Alexandria's residents perceived as the Bank of Virginia a threat, others, particularly Republicans, wanted to gain access to the Bank of Alexandria's credit: now an opportunity to expand the region's bank capital. In July a public notice announced the intention of local residents to petition the Virginia assembly to establish a branch of the Virginia bank "conspicuous" to Alexandria.<sup>22</sup>

Meeting in late July and early August, two months before the Bank of Virginia opened for business, the branch bank petitioners prepared a lengthy petition for the assembly. The residents of northern Virginia and the town of Alexandria, the petitioners argued, shared "essential and reciprocal interests" despite lying in different political jurisdictions. Alexandria, they noted, provided the region's farmers "a market . . . particularly suitable to their purposes." Still, the growth of the town's trade in recent years, the petitioners claimed, had Alexandria imported one-fifth

of all four reported from the United States—had “the same time severely required a much larger banking capital.” Like the Bank of Columbia’s Samuel Blodget, who argued that every “town of 7 or 8 000 inhabitants” should have “a banking capital of a million dollars divided into two parts,” the petitioners urged that the bank capital of the town be “at least double that of the Bank of Alexandria.” A new branch of the Virginia bank, they concluded, provided a perfect opportunity to furnish the delivery and to spread the benefits of the institution to all inhabitants of the state. The Virginia assembly, however, paid greater attention to the wishes of investors in the bank. Two weeks before the vote on the Fairfax County branch the bank’s stockholders had “resolved that it was unexpedient to extend the Bank further at this time.” The legislature postponed their decision.<sup>21</sup>

Undaunted, supporters of a branch bank marshaled their forces once more in 1808. At a public meeting in August advocates of the branch bank composed another petition to be forwarded to the assembly. They also transmitted the appeal to neighboring counties whose farmers and planters marketed their produce in Alexandria. In an attached letter, the bank proponents explicated the benefits which a branch outside Alexandria would bring to the “agriculturists.” Not only would the farmers enjoy “higher prices & more certain & ready sales,” they insisted, but a greater supply of “monetary capital” would ensure that imported goods could be

purchased "on much lower and easier terms."<sup>10</sup> This latter point was of no small concern. Imported items consistently cost more in Alexandria than in the northern towns, encouraging Virginians who could to purchase goods elsewhere.<sup>11</sup> The savings bank's receptive rubric, and sight of the surrounding counties and petitions to accompany the Fairfax petition. The assembly, however, was still guided by the conservative management of the Bank of Virginia, and rejected the petition.<sup>12</sup>

Not everyone in Alexandria heeded the legislature's decision. While the town Republicans actively campaigned for a branch of the state bank, Federalists had gone ahead and established a private institution, the Bank of Potomac. Members of the bank boasted that in contrast to the "Democratic" bank of Virginia their "completely Federal" institution was "set up under the auspices of some of the most respectable and wealthiest individuals" of the town and could "not fail of success."<sup>13</sup> Nonetheless, the bank had to survive a storm of criticism, much of it politically driven.<sup>14</sup>

The Bank of Potomac project began in July 1834. A public notice announced a meeting of "merchants and others concerned" in the creation of a new "Association bank." Two weeks later, hoping to attract the broadest interest possible, the proponents of the new bank published the "Articles and Association of the Bank of Potomac" as full page advertisements in both the town's newspapers. According to the articles the new bank would follow the practices and principles established by commercial banks throughout the

currency. The capital of the bank was set at \$500,000 and shares would be sold beginning September 5, 1834. In contrast to the Bank of Alexandria, however, the bank's capital was divided into \$100 shares; the sponsors hoped the lower value of the stocks would attract a wider range of investors. Each year the stockholders would elect twelve directors, out of whom another would be chosen a president. The board of directors would pay dividends biennially and were empowered to establish all by-laws and regulations of the bank. Beyond this, however, the articles placed few restrictions on the bank's managers. The bank could not hold property unless it was "mortgaged to the Company, by way of security" or was necessary for the "convenient transaction of business." In addition, the directors were held liable for any dividends declared that exceeded the "net profit" of the company and "exceeded[] the capital stock."<sup>22</sup>

If all these measures seemed familiar, the Bank of Potomac remained novel in one particular. Unlike the Banks of Alexandria and Virginia, the Potomac bank lacked a government charter of incorporation. Instead, it was a "limited copartnership" proposed to "continue for the term of twenty-one years." Lacking corporate status, the bank's stockholders and directors feared they would become personally liable for any debts the bank incurred. Thus, they included within the articles of association an explicit statement of the members' limited liability. "The partnership or property" of the company, the articles declared, "shall alone be responsible for the debts

and engagements of the said company," and as creditor of the bank "shall on any pretence whatever have recourse against the separate property of any present or future member." In addition, the articles stipulated that "every bond, bill, note" the bank issued "shall specially declare . . . that payment shall be made out of the joint funds of the Bank of Panama." A similar notice was to be placed in the bank book of every depositor.<sup>27</sup>

With this statement the bank's organizers were moving into uncharted terrain. As Edwin Poffens has noted, most early bank charters made no reference whatsoever to the personal liability of stockholders not involved in the management of the bank. The extent of shareholders' liability in chartered banks remained uncertain in American law until the Massachusetts court decided in 1845 that shareholders were not responsible beyond the amount of their investments.<sup>28</sup> The charter of the Bank of Alexandria, which included a specific statement of limited liability, was exceptional—but it was this charter with which the founders of the Panama bank were most familiar. Thus they created a controversy to shield the personal assets of the bank's shareholders similar to the legal protection included in the Alexandria bank charter. Whether such measures were legally enforceable was another question.<sup>29</sup>

Certainly opponents of the bank disparaged the credibility and legality of the articles of association. Just days before the charts were to be offered to the public, "M.P." launched a broad attack on the Panama bank:

N.P. claimed that the bank would effectively weaken existing banks and reduce their ability to offer accommodations. The new bank would draw "no additional specie . . . into action" but would only "do deals with the banks previously established the . . . specie before placed in their vaults." The bank's note issues might increase the circulating currency, but without adequate specie backing they represented a permanent "artificial supply" that would produce nothing but "irredeemable banknotes" for the entire business community. Equally disturbing, the bank's location within the District of Columbia gave it little possibility of ever obtaining a charter from either Congress or Virginia. The charter of the Bank of the United States prohibited Congress from incorporating any new banks during the life of that institution, while Virginia's prohibition, over the district had ended in 1801.

Most disturbing to N.P., however, was the attempt by the bank's architects to alter or evade existing laws. In trying to protect the personal assets of the stockholders the "articles of partnership" "inverted the . . . law of the land that a partner is the profits of any trading company shall be liable for the debts of the whole firm or of the company become insolvent." The creators of the bank, he concluded, "have attempted to convert" its clear "partnership" a quality which would transmute it into an incorporated company.<sup>17</sup> And if this were not enough, the bank's operations would directly violate existing Virginia law which prohibited the circulation

of private bank notes within the state. The bank's creators wanted to increase the western banking capital in order to exchange trade with northern Virginia's farmers. But the Virginia law stated that "a bank note can't pass the threshold of the bank door without meeting" the state's "prohibition."<sup>18</sup>

The bank also had its defenders. Responding to N.P., "Mr. Foster" argued that unincorporated banks violated no existing laws. "Numerous banks," Morison noted, operated without charters "to the northward and westward of us," while in the District of Columbia "no legislature's authority competent to incorporate a banking company" existed during the life of the present charter of the BCB. Considering the numerous privileges accorded by incorporation, Morison concluded that "a charter can be considered as of little value to a banking company." As for the Virginia law against private bank notes, Morison noted that it prohibited only the circulation of notes "payable to the bearer." Federal bank notes, in contrast, would be made "payable to the order of the 'Teller.'" Thus, of course, was little more than legal sophistry: whether payable to the teller or the bearer the bank's notes were still a private issue intended to pass as cash. Still, Morison affirmed (and here he no doubt told the truth) that "the silent lawyers" shared his interpretation of the law.<sup>19</sup>

Realizing the weakness of his legal arguments, Morison expounded his greatest efforts demonstrating that the growth of Alexandria commerce in the previous decade required an enlarged banking capital, whether

supplied by the Potomac bank, a branch of the bank of Virginia, or both. The value the bank's exports in the previous year, he noted, amounted to over \$1.2 million. In such circumstances there could be little doubt "that the success of the town will require the aid, and afford full employment for all the capital of both establishments." Indeed, "common sense" dictated that any addition to the town's banking capital could only bring greater prosperity. For Mariner, the ultimate success of the bank depended not on the legal structure which supported it, but rather upon the prosperity and productive wealth of the region and the town.<sup>17</sup>

Apparently, many residents of Alexandria agreed. On September 7 the shares of the bank went on sale, within twenty-four hours the entire subscription had been filled. A week later the shareholders elected the first board of directors and on December 4 the bank opened for business. Like the Bank of Alexandria, the Potomac bank was successful from its earliest days. On May 8, 1808, just a month after the bank's shareholders had paid their subscriptions in full, the directors declared the bank's first dividend of \$1 per share. Over the next five years the bank's dividends averaged 2 percent per year. As a congressional report concluded in 1848, such healthy returns betokened a bank that "has established a solid credit" and whose "operations have been prudently conducted."<sup>18</sup>

Still, without a charter the bank remained vulnerable to its political enemies. Just how vulnerable became clear in late 1804 when the Virginia

assembly passed another law outlawing the circulation of private bank notes within the state. Designed to close the loophole in the 1788 law, the new legislation prohibited the circulation of private notes or bills issued by any unauthorized banking company "whether payable to bearer or any other person." The bank's supporters in the Virginia house put up a valiant effort to undermine the legislation. They first called for a postponement in the consideration of the bill. When this tactic failed, they substituted a amendment exempting the Bank of Potomac from the operation of the act. To make the amendment more palatable bank partisans also proposed that the bank be moved to the West End of Alexandria, that one-quarter of the capital stock be loaned to the state treasurer without interest, and that the state be given a vote in the election of bank directors. If accepted, these amendments would have subverted the campaign for a branch of the Bank of Virginia in Fairfax County and launched the Potomac bank with a somewhat scandalous. The Virginia assembly, however, remained unmoved by the incentives, the unamended act passed by an overwhelming majority.<sup>19</sup>

Undeterred supporters of the Potomac bank renewed their campaign to repeal the act the following session. The legislature received identical pre-bank petitions from seven northern Virginia counties. The petitioners explained that the Bank of Alexandria's capital was entirely expended in various long term investments designed to stimulate the regional economy. Consequently, the north's merchants looked east to purchase the country

produce shipped to the town. It was to fill this need that the town's merchants had established the Bank of Putnam. However, the law prohibiting the circulation of private bank notes, the petitioners lamented, had struck "a deadly blow at the only possible source" of banking capital for the region and destroyed "the individual prospects of many who . . . had ventured in the Putnam Bank."<sup>21</sup>

In addition, the directors of the Putnam bank petitioned the House of Delegates directly. The recent law which prohibited the circulation of private bank notes in Virginia, they explained, has "annihilated" "the utility" of the bank "within narrow limits." Not wishing to violate the law and hoping to use the bank's capital to aid the farmers of northern Virginia, the directors requested that the state issue a charter of incorporation for the bank "on condition of their establishing themselves within the jurisdiction of Virginia and submitting to the laws of Alexandria." The directors added that they would "cheerfully consent to any regulations" of the bank's capital so that "the citizens of Virginia may have an opportunity to possess themselves of an interest in the establishment."<sup>22</sup>

Once more, however, the Virginia assembly rejected the proposals of the bank's admission. The petitioners requesting an amendment in the bank note law did not even strike it out of the committee asked to consider them. After numerous delays and a lengthy debate the house also refused to take action on the bank's petition. It did not matter. The Bank of Putnam

operated successfully despite the state's restrictions. Eiting a precious economic asset in the region. As Leven Powell, a Loudoun County planter noted in early 1808 the assembly "can lay a penalty on any person who shall receive or pass" the bank's notes, but the "bank will do as well as any other bank if . . . it is of advantage to the agricultural [interest] that the mercantile capital should be as large as possible."<sup>17</sup>

Both of Alexandria's banks opened probably after 1805, with the Bank of Potomac conducting business without a charter until 1811. In early 1810, with the charter of the Bank of the United States about to expire, both banks petitioned the federal government for acts of incorporation. The House committee responsible for the District of Columbia recommended in 1810 and again in 1811 that both banks receive federal charters, and Congress obliged on February 18, 1811.<sup>18</sup> However, the calls for an expanded bank capital did not end. Over the next decade five new banks would be established in Alexandria, expanding the town's banking capital from \$1,600,000 to just under \$2.5 million in 1820. Equally notable, the price of shares for these banks dropped dramatically. All of the new banks "charged \$30 per share or less" with the Mechanic Bank of Alexandria, established in 1818 dividing its capital into 600 shares. The new banks enabled persons of modest means to profit from bank dividends, and ensured the spread of credit beyond the mercantile class. In northern Virginia the progressive expansion of access to banking capital—in short, the

democratization of banking—began with the banks of Alexandria and Potomac and reached its culmination with these later banks.<sup>59</sup>

Like the agrarian Republicans of the 1790s, nineteenth-century critics disparaged the "bank money" which served the nation. Certainly, the instability of many of the new institutions gave them much to condemn. A number of Alexandria's banks—for example—would fail in the 1830s and 1840s (the Bank of Alexandria closed its doors in 1834 while the Potomac bank merged with the Farmer's Bank of Virginia in 1847).<sup>60</sup> Still, the continuing demand for banking capital revealed that most residents of northern Virginia had fully accepted banks as an essential component of economic life by the first decade of the nineteenth century. They did so because the region's early banks played a key role in fostering economic development through their increasing readiness to advance long-term accommodations to local entrepreneurs. Though banks continued to advance heavily to merchants, a significant proportion of the banking capital—as much as 60 percent—was advanced to farmers, mechanics, and internal improvement companies. No wonder the region's inhabitants continually pressed for an expansion of the banking capital. As William Fairbairn, sponsor and early director of the Bank of Potomac, noted in 1804, the bank is an "establishment . . . productive of inestimable benefits."<sup>61</sup>

## Notes

1 October 9, 1792, *Alexander City Legislative Petition, 1778-1800*, Library of Virginia, Richmond, Virginia (hereafter LOV).

2 Donald R. Adams, "The Role of Banks in the Economic Development of the Old West," *Essays on Nineteenth-Century Economic History: The Old Northwest* (David C. Klingenstein and Richard E. Volden eds. Champaign, Ohio: University Press, 1975), 304-345; Hugh T. Rockoff, "Frontiers of Banking and Regional Economic Development in the United States, 1840-1860," *Journal of Economic History* 35 (March 1975): 169-181; and Herman E. Kroos, "Financial Institutions," *The Growth of the Shaggy City, 1760-1825*, David T. Oakberry, ed. (Charlottesville: University Press of Virginia, 1987), 181-210 [quote 210]. Albert Gallatin, Thomas Jefferson's Secretary of the Treasury and a supporter of banks, made a similar argument in 1803 when he noted, "the want and demand for currency increase in proportion to the density of the population, the consequent multiplicity and growth of commerce, and the division of labor. The demand for currency in any country is generally proportionate to its wealth," see *Considerations on the Currency and Banking System of the United States* (Philadelphia: Carey & Lea, 1821), 25. However, both Kroos and Adams note changes in the practices of American bankers by the 1850s, namely: a willingness to lend for longer terms in transportation companies and industrial firms, and an eagerness to issue more bank notes. See for example: Kroos "Financial Institutions," 182-188, 191, and Adams, *Essays on Enterprise in Early America: A Study in Stephen Girard's Bank, 1812-1820* (Philadelphia: University of Pennsylvania Press, 1973), 93-141.

3 For overviews of the role of private banking in economic development after 1760, see Edwin J. Perkins, *American Public Finance and Financial Services, 1760-1860* (Columbus: University of Ohio, 1964), 7-12, 126-128, 266-267; Paul A. Gales, "The Role of Capitalism in the Early Republic," *Journal of the Early Republic* 38 (Summer 1985): 143-164 [quote 144]; Allen Bicknell, *The American Bank of American Capitalism* (Charlottesville: University Press of Virginia, 1988), 107-108; Gordon S. Wood, *The Revolution and the American Revolution* (New York: Alfred B. Knopf, 1968), 50-125; and Bray Hammond, *Banks and Politics in America, From the Revolution to the Civil War* (Princeton: Princeton University Press, 1957), 48-113, 144-171. The best descriptions of the daily operations of early American banks can be found in J. Van Doren-Smith, *The Development of American Commercial Banking, 1783-1827* (Kent: Ohio State State University, Bureau of Economic and Business Research, 1965). For more specialized studies of the role of private banks in economic development, see Thomas M. Goveyager, *A Virginia Board of Commerce, Merchants and Economic Development in Revolutionary Philadelphia*

(Chapel Hill: University of North Carolina Press, 1966), 256-270; Mason R. Lowmance, 'Banks, Banking, and Economic Development: The New England Case,' *Journal of Economic History*, 46 (September 1986), 647-688; Alan L. Diamond, 'Investment Commitments and New York City Mutual Savings Bank Financing of Antislavery Development,' *Ibid.*, 52 (December 1992), 815-848; Andrew A. Beveridge, 'Local Lending Practice: Borrowing as a Small Northeastern Industrial City, 1808-1905,' *Ibid.*, 45 (June 1985), 593-608; Leroy E. Davis, 'The New England Textile Mills and the Capitalist Markets: A Study of Industrial Borrowing, 1840-1860,' *Ibid.*, 20 (March 1960), 1-36; and Harry R. Stevens, 'Bank Experiments as a Western Town, 1805-1822,' *Business History Review*, 29 (June 1953), 138-154. On the importance of 'currency finance' - note emissions of paper that provided both a circulating medium and a method of public finance before 1780, see E. James Ferguson, *The Power of the Purse... A History of American Public Finance, 1726-1789* (Chapel Hill: University of North Carolina Press, 1961), 1-24, 180-186; and Mary Schweitzer, 'State-Issued Currency and the Bankruptcy of the U.S. Constitution,' *Journal of Economic History*, 46 (June 1986), 311-382.

#### 4. Harry Ammon, 'The Republican Party in Virginia, 1789-1828'

Ph.D. Dissertation, University of Virginia, 1946, 180-192, passim. 'The Formation of the Republican Party in Virginia,' *Journal of Southern History*, 10 (August 1953), 289-300; Charles Ambler, *Sectionalism in Virginia from 1776-1861* (Chicago: University of Chicago Press, 1918), 62-63; George T. Roper, *Eight Years of Radical Banking in Virginia* (New York: MacMillan Company, 1937), 28-29; and Warren E. Raymond, *Chimpanzee Politics, 1788-1828* (New York: Columbia University Press, 1978), 363-370, 377-386, 404-406, 475-476. On the battle over funding and assumption in Congress and Ferguson, *Power of the Purse*, 269-335. On Taylor's agrarian republicanism and attack on the 'financial interest' see Taylor, *Reflections of Parties, or the Political Effects of the Paper System* (Cambridge: Philadelphia: Francis Bailey, 1794), passages (pages 4, 8), and idem, *An Enquiry into the Principles and Tendencies of Current Public Measures* (Philadelphia: Thomas Dobson, 1794), passim. On Mason's attitude to Hamiltonian policies see: Memoir to James Madison, February 9, 1793 (Robert A. Rutland, ed., *The Papers of George Mason, 1721-1793*, 3 Volumes (Chapel Hill: University of North Carolina Press, 1970), 3: 1294-1307. On R.H. Lee's animosity to the bank see: Lee to James Madison, January 18, 1791, Lee Family Papers, 1792-1795, Alderman Library, University of Virginia, Charlottesville, Virginia (hereafter LVA). See also R.A.J. Johnson, *The Foundational of American Economic Freedom: Government and Enterprise in the Age of Washington* (Mannajopolis: University of Minnesota Press, 1979), 101-118, 147-168; Robert E. Wright, *John Taylor of Caroline: Radical Republican* (Columbia: University of South Carolina Press, 1986),

19-60; and Steven Watts, *The Republic Reborn: War and the Making of Modern America, 1780-1820* (Baltimore: Johns Hopkins University Press, 1987), 18-20.

5. Eugene D. Genovese, *The Political Economy of Slavery: Studies in the Economics and Society of the Slave South*, Second Edition (Gainesville: N.W. University Press, 1962; originally published, 1963), 22-80 (quote), 156-164, 184-186; Herman Wayne Brown, *Southern Honor: Ethics and Behavior in the Old South* (New York: Oxford University Press, 1982), 143-144; Maria Pons, "Frontier Bankers, and Money: Class Relations in the Antebellum South," *Journal of Economic History* 42 (March 1982), 43 (quote); also, "The Financial Structures and Banking Institutions of the Antebellum South, 1813-1861," Ph.D. Dissertation, University of Massachusetts, 1990; and Lewis Cecil Gray, *History of Agriculture in the Southern United States to 1880*, 2 Volumes (Gainesville: FLA. Folger South, 1958; originally published, 1903) 2: 712-713. A recent issue of the *Journal of the Early Republic* devoted to the question of the 'imperial transition' of the United States provides a good summary of the dominant historical view of the antebellum South. The only article devoted to the region argues that in contrast to the rest of the nation the South failed to undergo a 'market revolution'. see Douglas B. Egerton, "Markets without a Market Revolution: Southern Planters and Capitalism," *Journal of the Early Republic* 10 (Summer 1990), 207-232. For contrary views which see banks playing a central role in Southern economic growth see, Larry Schweikart, *Banking in the American South: From the Age of Jackson to Reconstruction* (Gainesville: Louisiana State University Press, 1987); and George D. Green, *Finance and Development in the Old South*, *American Bankers, 1801-1861* (Stanford, CA: Stanford University Press, 1972).

6. Joseph Standish Davis, *Banks in the Early History of American Corporations*, 2 Volumes (New York: Russell & Russell Company, 1965; originally published, 1817) 2: 58. Banks in 1790? Noah Webster, "A Sketch of the History and Present State of Banks and Insurance Companies in the United States," *Miscellaneous Papers on Political and Commercial Subjects* (New York: Bart Franklin, 1847; originally published, 1802), 43-45; William Goetz, *A Short History of Paper Money and Banking in the United States, to which is Prefixed an Inquiry into the Principles of the System*, 2 Volumes (New York: Augustus M. Kelley, 1967; originally published 1832) 2: 42-44; Gallatin, *Considerations on Currency and Banking*, 58. In addition, Gallatin estimated that there were 208 banks in 1820, 260 the following year, and 387 in 1830; see 45-46.

7. Cathy D. Niverson, "Capitalizing Hope: Economic Thought and the Early National Economy," *Journal of the Early Republic* 10 (Summer 1990), 280-285; Janet A. Raveman, "Money, Credit, and Federalist Political

*Knowsley: Second Confederation: Origins of the Constitution and American National Ideology*. Richard Newman, Stephen Duggan, and Edward D. Carter, eds. (Chapel Hill: University of North Carolina Press, 1987), 128-133; and also, "Republican Economic: Political Economy in New York after the Peace of 1815," *New York and the Rise of American Capitalism: Economic Development and the Social and Political History of an American State, 1783-1870*, William French and Conrad Edick Wright, eds. (New York: New York Historical Society, 1988), 1-48 (esp. 1-12).

8. Dorrhinger, *Virginia Spirit of Enterprise*, 254-256; Davis, *History of American Corporations*, 2: 34-35; and Morison, quoted in Ferguson, *Essays in Am. Econ.*, 129.

9. Gordon S. Wood, *The Creation of the American Republic, 1776-1787* (New York: W.W. Norton, 1972; originally published, 1969), 480-481; Johnson, *Foundations of American Economic Freedom*, 187-188; Dorrhinger, *Virginia Spirit of Enterprise*, 264-272; Davis, *History of American Corporations*, 2: 41-42; Hammond, *Bank and Politics*, 32-34; and Kenneth "Federalist Political Economy," 140-142, 182-183. See also Pelatiah Webster, "An Essay on Credit: In Which the Doctrines of Banks are Considered, and Some Remarks are Made on the Present State of the Bank of North America," *Political Essays on the Nature and Operations of Money, Public Finance, and Other Subjects*, . . . (Philadelphia: Joseph Coocheshank, 1781), 142-144; and N. Webster, "Miracle of Banks and American Congresses," 5-6.

10. Thomas Penn noted in 1756 that "the gold and silver are not the natural products of Pennsylvania: we have no other hard money than what the produce of the country exported to foreign parts brings in." "The Affairs of Pennsylvania," *Thomas Penn, Collected Writings*, Rose Finner, ed. (New York: Library of America, 1976), 362.

11. P. Webster, "An Essay on Credit," 405-406; Bennett, "Federalist Political Economy," 120-121. Such arguments of course followed Adam Smith. *An Inquiry into the Nature and Causes of the Wealth of Nations*, 2 Volumes (Edina Coates, ed. [Chicago: University of Chicago Press, 2005; edition originally published 1994], 2: 212-242).

12. Smith, *Wealth of Nations*, 1: 120-121; P. Webster "Essay on Credit," 405-406; Hammond, *Bank and Politics*, 30 (quote), 87-102. On the uncertainty of early bankers regarding what constituted a safe reserve of specie to circulating bank notes see Robert M. Haskins, "Pennsylvania Banks and the Peace of 1815: A Reinterpretation," *Journal of the Early Republic* 9 (Fall 1989): 243-246. In the 1830s the confusion still existed. William Couge, a Jacksonian supporter of hard money, noted that "the every

silver dollar they have in their pockets: some of the Banks have two paper dollars in circulation: some three, some five, some eight: and some Shillings" *Bank, Money, and Banking*, 1-42.

13 Overhager, *European Spirit of Enterprise*, 304-318; Smith, *Sketch of Nations*, 1: 348-349.

14 P. Webster, "Essay on Credit," 443-444; Penn: "The Affairs of Pennsylvania," 362 (quote); and Penn: *Descriptions, or Government, the Affairs of the Bank, and Paper Money* (Philadelphia: Charles Cist, 1786). See also: *Ann Penn: The Penn's Republic: British Ideology and Social Change* ("The American Revolution: Explorations in the History of American Republicanism," Alfred F. Young, ed. [DeKalb: Northern Illinois University Press, 1979], 219-228); Johnson, *Evolution of American Economic Thought*, 197-209; and Hammond, *Banks and Politics*, 30-68. Hammond noted that Robert Morris was particularly insistent on the importance of banks for farmers: "Morris recalled occasions when farmers had started early with their loaded wagons on Market Street and at the end of the day had driven them home as full as they came, because there was no cash. Produce in the market had been plenty . . . and he himself had been eagerly bent on the purchase of it, but could not command the money for the purchase. . . . Now that there was a bank, money was always available: for the bank furnished its notes to the merchants as cash for their obligations, and the notes served as money with which they paid for their purchases." (37).

15 M. Webster, "Sketch of Banks and Insurance Companies," 47; Overhager, *European Spirit of Enterprise*, 389 (quote); Hammond, *Banks and Politics*, 46; P. Webster, "Essay on Credit," 487.

16 *Provisional, Development of American Commercial Banking*, 35; Green, *Bank, Money, and Banking*, 3: 31; Overhager, *European Spirit of Enterprise*, 303; and Davis, *History of American Commerce*, 3: 39.

17 Hunter to Theodore Bland, May 1786, "Selections from the Campbell Papers," *Virginia Manuscripts of History and Biography*, 9 (July 1901), 70; Green, *Bank, Money, and Banking*, 13; Overhager, *European Spirit of Enterprise*, 389-386; Entry of December 13, 1783, *Hess and Harrison Journal*, 1778-1787; Hess and Harrison, *Virginia Account Books*, 1778-1781, LVII; October 9, 1782, *Alexandria Legislative Petitioner*, LXX; *Columbian Mirror and Alexandria Gazette*, January 23 and 26, 1783.

18 *Virginia Gazette and Alexandria Advertiser*, May 18 and June 23, 1791; Fitzgerald to Hamilton, November 24, 1793; James C. Hamilton, ed., *The Works of Alexander Hamilton*, Congress Has Correspondence, and

*His Political and Official Writings, Extracts of the Federalist, Civil and Military*. 7 Volumes (New York: Charles S. Francis and Company, 1855), 5:485. The petition to the bank directors is not extant. On Fitzpatrick see T. Michael Miller, *Andrews and Members of Alexandria, Virginia, 1780-1800*. 2 Volumes (Bowie, MD: Heritage Books, 1989-1990), 2: 738.

18. "The Bank of the United States: Petitions from Virginia Cities and Towns for the Establishment of Branches, 1794." *Virginia Magazine of History and Biography*. 8 January 1981, 867-885. See also *Early Years of French Banking*, 16-20, 24-25, *Virginia Gazette and Alexandria Advertiser*, January 12, 1793. The delay in establishing a Virginia branch of the BUS had much to do with Jefferson and Madison's opposition to the institution. In early 1793 Jefferson informed Madison that "It seems nearly settled with the Treasury-bankers that a branch shall be established at Richmond." He suggested that "a counter bank be set up to defend the agricultural area, by letting them have money on a deposit of tobacco or even wheat; for a sheep, mutton, and would not such a bank confer the legislature in its favor & against the Treasury bank?" see, Jefferson to Madison, July 3, 1793. Paul Laurence Ford ed., *The Works of Thomas Jefferson*, Federal Edition, 12: Volumes (New York: G.P. Putnam's Sons, 1904-1905), 7: 332. Jefferson's hostility to the BUS survived even after its charter had been renewed in 1811. In 1814 he wrote "I have ever been the enemy of banks, not of those of discount for cash but those issuing their own paper into circulation, and thus hoarding our cash. My zeal against these institutions was so warm and open at the establishment of the Bank of the United States that I was decided on a mission by the order of bank-managers, who were willing to fling from the public their crowding and barren gold;" see Jefferson to John Adams, January 24, 1814. H.A. Washington ed. *The Writings of Thomas Jefferson*, Being His Autobiography, Correspondence, Reports, Messages, Addresses, and Other Writings, Official and Private, 9 Volumes (New York: J.C. Fiske, 1863-1867), 4: 106. Opponents of the BUS also suggested that the Virginia legislature limit the interest rate the BUS could charge on the note to 5 percent, see, *Report: Chesapeake Politian*, 472.

19. *Virginia Gazette and Alexandria Advertiser*, September 18, 1793; October 5, 1793; *Alexandria Legislative Petitions*, L17.

21. *ibid.*

22. *Journal of the House of Delegates of the Commonwealth of Virginia*, . . . 1793 (Richmond: Augustus Davis, 1793) 127-130 which reveals that opponents of the bank tried to lower its discount rate from 6 to 5 percent. John Pope quoted in David M. Cole, *The Development of Banking in the District of Columbia* (New York: William Frederick Press, 1969), 7. Jefferson to Madison, November 21, 1793. Madison Papers: Library of

Congress (American L.C.), Report, *Congressional Bulletin*, 473-474. As Henry Lee put it: "One way" to preserve the State from this "other operation [i.e. the FURB] is to establish a Bank under the auspices of the University. This might easily be done & would counteract if not defeat the plan contemplated." See, Lee to Madison, September 10, 1792: Henry Lee Papers 1788-1846, LON.

23 William Walter Howard, ed., *The Statutes at Large, Being a Collection of all the Laws of Virginia, from the . . . Year 1606*, 13 Volumes (Richmond, New York, and Philadelphia, 1800-1820), 13: 893-894. See also John Joseph Walsh, *Early Banks in the District of Columbia, 1790-1818* (Washington, D.C.: Catholic University of America Press, 1969), 24-27; Cole, *Banking in D.C.*, 9-11; Allen Gardfield Crosby, *Supremacy and Control of Virginia State Banks* (Charlottesville: Institute for Research on the Social Science, University of Virginia, 1927), 14-28, 45-50; and Charles E. Hogue, "The Financial Institutions of Washington City in Its Early Days," *Records of the Columbia Historical Society* 9 (1945): 9-9.

24 Columbian Mirror and Alexandria Gazette, December 2 and 8, 1792; January 23, 28, February 13, and April 4, 1793; *Virginia Gazette and Alexandria Advertiser*, December 18, 1792 (quoted), and May 16, 1793; Walsh, *Early Banks in D.C.*, 28-34; "Balance of Books, Bank of Alexandria," January 6, 1794, *Calendar of Virginia State Papers and Other Manuscripts*, 11 Volumes (Richmond, 1875-1891), 7: 6. The nine original directors were Richard Conway, William Harshbarger, Robert T. Hoot, William Wilson, William Herbert, Josiah Thompson, William Redgum, Joseph Watson, and John Fitzgerald. Fendall served as president until 1796 when William Herbert took his place.

25 François Alexandre Frédonc, *duc de la Rochefort-en-Auxerrois Travels Through the United States of North America, the Country of the Indians, and Upper Canada in the Years 1795, 1796, and 1797*, 1798 as *Authorised Account of Lower Canada*, 3 Volumes, H. Newman, ed. (London: R. Phillips, 1799), 1: 508; *Alexandria Express*, January 23, 1806; "Balance of Books, Bank of Alexandria," January 6, 1794; January 6, 1796; January 5, 1798; January 5, 1799; January 12, 1798; January 6, 1800; and March 17, 1802; *Calendar of State Papers*, 7: 6, 420; 8: 500, 490, 500-9, 31, 290. After 1801 the participation of Alexandria and the bank shifted to Congress and the bank produced no surviving financial statements until 1854. For acceptance of Alexandria bank notes see, for example, *Columbian Mirror and Alexandria Gazette*, April 14 (James Paine will take bank notes for wages) and May 3, 1793 (William Herbert will take bank notes for land).

26 The dividends paid per year between 1795 and 1808 were: 1795, 15 percent; 1796, 10 percent; 1797, 0.5 percent; 1798, 0.55 percent; 1799, 0.5 percent (estimated); 1800, 0.5 percent; 1801, 12.5 percent; 1802, 5 percent; 1803, 0.5 percent; 1804, 5 percent; 1805, 5 percent. Thus, on the eleven years from 1795 to 1806 dividends on bank stock averaged 5.00 percent. See *Columbian Mirror and Alexandria Gazette*, July 7, 1798; January 5 and July 26, 1798; January 2 and July 6, 1799; January 4, 1799; January 20, 1799; January 21 and July 7, 1800; *Alexandria Advertiser and District of Columbia Daily Advertiser*, June 25, 1798; *Alexandria Advertiser and Commercial Intelligence*, January 5, 1801; January 18 and July 2, 1802; January 3 and July 5, 1803; *Times*, and *District of Columbia Daily Advertiser*, July 6, 1803; *Alexandria Daily Advertiser*, January 4 and July 1, 1804; January 9 and July 2, 1805; and January 6, 1806. "History of Columbia Stock," *American State Papers, Documents, Legislation and Executive of the Congress of the United States*, Class 16, Miscellaneous, 22(1822), 2 Volumes (Washington: D.C.: Gales and Seaton, 1834), 2: 45-46; Washington to Henry Lee, September 5, 1795; John C. Fitzpatrick, ed. *The Writings of George Washington from the Original Manuscripts Surviving*, 22(1822), 39 Volumes (Washington: Government Printing Office, 1907-1943), 36: 29-30.

27 *Alexandria Advertiser*, November 1 and 3, 1797; *Alexandria Advertiser and District of Columbia Daily Advertiser*, May 20, 1798 and January 1, 1799 (Shreve); March 6 and September 15, 1798 (Lawson); *Alexandria Advertiser and Commercial Intelligence*, November 20, 1800; May 10, June 24 and September 12, 1803 (Flemons); Lawson died in 1802 but Moore and Flemons were still in business in 1803, see Miller, *Antislavery and Manumission*, 3: 174, 272-273, 342. On the operations of some brokers elsewhere in the District of Columbia see, Cole, *Banking in D.C.*, 137-139.

28 See for example *Alexandria Advertiser*, November 1, 1797 (Bernard Pollock and Company selling dry goods in exchange for bank shares); July 18 (David Pollock and Company selling dry goods in exchange for bank stock) and September 5, 1798 (Robert Allen selling wool in exchange for bank stock); *Columbian Mirror and Alexandria Advertiser*, May 29, 1798 (J. B. Nichols wants to buy stock); *Times*, and *District of Columbia Daily Advertiser*, November 25, 1800 (Thomas Criss wants to buy five shares); July 29, 1802 (J. F. Mercer selling bond in Louisiana Co. in exchange for bank shares); *Alexandria Advertiser and Commercial Intelligence*, February 4, 1800 (William L. Hall wants to buy stock); January 12 (Henry K. May and Company wants to buy stock) and November 18, 1803 (Frederic Lightfoot Lee wants to buy stock); *Alexandria Daily Advertiser*, January 19 (Charles Leide and George Trapham selling

three shares), March 20 (William Herbert selling three shares), August 20 (James Patton selling back shares), November 20 (William Hodgson will receive back shares in exchange for land) and December 14, 1664 (J. Macfarlane selling back stock). This list is by no means complete.

20 Book of Alexander Shanks: Herbert Family Papers, VHS 1633  
Virginia Historical Society, Richmond, Virginia. Cited as VHS; Alexandria, Advertising and Commercial Intelligence, January 23, 1865.

21 The Will of George Washington (Baltimore: Thomas Dalton, 1800); Estimish, Charles & Brother's Advertisers, March 21, 1796, Cole's Poking in D.C., 158. Four of the women identified as previous owners of Robert Beverley's shares (Letitia Kennedy, Margaret Magruder, Elleanor and Mary Thomas) probably fall into the category of widows, *etc.*  
Alexandria Back Sheet: Herbert Family Papers, VHS "Photography," Alexandria Reporter, May 10, 1865.

22 Of the early five previous owners of Beverley's shares, twenty-nine (or 58 percent) were merchants (Charles Bennett, George Clementson, Jonathan Derby, James Demasle, John Dending, David Keaton, John Ford, John Gill, Robert Henshaw, Robert B. Jamerson, John Janyer, Philip Magruder, John Macfarlane, James Miller, John Newman, Robert Patton, Thomas Patton, Charles Scott, William Smith, James Somerville, George Stensell), John D. Sisson, George Taylor, John Taylor, John Thomas, John Wardell, Thomas Wardell, Joseph Watson, William Wilson, and Charles Young; ten (or 19 percent) were professionals (James Kennedy and E. C. Beck [doctors], George Demasle, P. B. Franklin and Richard M. Scott [surgeons], Thomas Davis and James Hale [clergymen], Jesse Skene, A. J. Thomas and John Wise [lawyers/keepers]); nine (or 16 percent) were planters (Francis Carter, William Hollman, Henry Lee, Richard Hurd Lee, Theodore Lee, Charles Little, William Mitchell, William Montgomery, Levin Powell); and three (or 5 percent) were artisans (James Irwin [printer], Andrew Jamerson [bookbinder], and Mendenhall Miller [silversmith]). The occupations of fourteen (or 22 percent) could not be positively identified (Walter Chandler, James Bennett, Letitia Kennedy, Margaret Magruder, Francis Newman, William Odum, William Smith, Henry Rice, Alexander Simpson, Thomas Snowden, Corwin Peyton Thomas, Eleanor Thomas, Mary Thomas, and John R. Whetstone). See Alexandria Back Sheet: Herbert Family Papers, VHS Miller, Artisans and Merchants, 1, 36-72, 95, 98, 108-109, 186-208, 218, 229, 238-239, 244-245, 260, 269, 284, 286, 289, 290, 292, 298, 378, 379, 383, 384, 385, 388-389, 393, 3, 5, 24, 90, 104, 106, 122-123, 186, 197-202, 252, 274, 281-282, 285, 286, 287, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000. Four other stockholders can be

identified from newspaper advertisements. Nine of whom were merchants or professionals: *see*, *Alexandria Advertiser and Commercial Intelligence*, February 22, 1804 (Fingersh, merchant, five shares); *Alexandria Daily Advertiser*, January 18 (William Triplett, Fairfax Co planter, three shares); March 18 (William Harbert, broker, three shares), and April 13, 1804 (George Ogle, merchant, two shares)

22 *Columbian Mirror and Alexandria Gazette*, February 27, 1798; *ibid.*, January 31, 1800. "Incorporated Banks and Insurance Companies in the District of Columbia." February 18, 1804, *American State Papers*, Documents, Legislation, and Executive, of the Congress of the United States, Class 3, Finance, 1789-1824. 5 Volumes (Washington, D.C.: Gates and Sonnet, 1955). 1: 403. "Bank Overhauls," *McKean's Family Papers*, 1788-1824, DNA. In 1800 the Virginia merchants for Fairfax and Loudoun counties also announced that they would place their funds in the Bank of Alexandria. *see*, *Columbian Mirror and Alexandria Gazette*, March 25, 1800. *See* in William Luskoff Lee, April 6, 1795, Edward George Lee Papers, 1758-1894, Y135.

23 *Columbian Mirror and Alexandria Gazette*, April 6, 1798. *See* to *Landon's Overseer*, September 28, 1794. *Calendar of State Papers*, T 315.

24 *Banking, Banks and Politics*, 86. On the rise of Alexandria's mercantile *see* Chapter 2. *Elizabeth Gosselin & Bertheloy Advertiser*, March 2, 1791. J.F. Meyer to Richard Meyer, May 9, 1794, Meyer Family Papers, 1804-1889, Y135. "Value of Exports for Five Years Ending September 30, 1798." *American State Papers*, Documents, Legislation, and Executive, of the Congress of the United States, Class 4, Commerce and Navigation, 1789-1822, 2 Volumes (Washington, D.C.: Gates and Sonnet, 1812). 1: 321. *Cole, Benjamin et al. vs. R.C.*, 3. The Maryland assembly incorporated the Bank of Columbia in 1794 with a capital of \$1,000,000 (though bank organizers sold members near enough shares to fill the entire capital)

25 November 21, 1798, *Alexandria Legislative Petitions*, L97. The petition was signed by 285 individuals, and it was accompanied by identical petitions from Fairfax and Fauquier counties (212 signatures)

26 November 21, 1798, *Alexandria Legislative Petitions*, L97. The petition was signed by 204 individuals. Identical petitions were forwarded on the same date from Loudoun County (thirty two signatures), Frederick County (fifty-eight signatures), Bertheloy County (thirty signatures), and Spotsylvania County (unknown number of signatures)

37. Samuel Shephard, ed. *The Statistics of Loans of Virginia, from 1733 to 1800*. 3 Volumes (New York: ABC Press Inc., 1976; originally published Richmond 1830). 1: 373-374. *Columbian Mirror and Alexandria Gazette*, January 2, 1780; William Herbert to the Governor March 17, 1800. *Calendar of State Papers*, 8: 408, 9: 308. *Times*, and *District of Columbia Daily Advertiser*, June 10 and July 18, 1801.

38. *Columbian Mirror and Alexandria Gazette*, May 12, 1780; *Alexandria Advertiser*, August 2, 1791. In 1780 Washington though he pronounced himself "a novice" in "the business of borrowing and discounting" requested that the bank renew his sixty day note on the bank, see Washington to William Herbert, September 1, 1780. *Writings of Washington*, VI, 351-352. Historical reports that by 1800 the "suspects" of banks "had begun to lend for longer periods." Renewals on notes became "a matter of course" though "lenders liked to pretend that they were faithful" to the "traditions of short-term credit." *Banks and Politics*, 189.

39. "Release of Bonds, Bank of Alexandria," January 6, 1796, January 8, 1797 and March 17, 1800, *Calendar of State Papers*, 9: 230-418, and 9: 280.

40. William Hartshorn to Jacobus Andrus July 12, 1770 (*ibid.*, 8: 447) (quote) P.W. Fendall to Governor February 18, 1784 and J. Pryor to Governor March 2, 1784 (*ibid.*, 7: 28-30, 60) see also John Steele to Governor June 20, 1785, *ibid.*, 8: 593. *Cole, Bankers in D.C.*, 18. *Alexandria Daily Advertiser*, May 1 and 7, 1800; and Walsh, *Early Banks in D.C.*, 45. The federal government also deposited over \$170,000 in public funds in the Bank of the Alexandria between 1804 and 1808; see, Albert Gallatin, A Letter from the Secretary of the Treasury, Transmitting a Statement of the Amount of Deposits of the Public Money in the United States and Other Banks.... (Washington: A. & O. Way, 1808) 8-7. See also Richard Sylla, John D. Lough, and John J. Wallis, "Banks and State Public Finance in the New Republic: The United States, 1790-1840," *Journal of Economic History* 47 (June 1987): 809-885.

41. *Alexandria Advertiser*, August 2, 1795; *Alexandria Advertiser and Commercial Intelligence*, September 18, 1800. For other examples in which bills have been paid and Alexandria notes have been sold on credit for bank notes see *Alexandria Advertiser*, September 6, 1797; *Columbian Mirror and Alexandria Gazette*, May 5, 1798, *Times*, and *District of Columbia Daily Advertiser*, July 20, 1800; *Alexandria Advertiser and Commercial Intelligence*, September 11, 1801; May 17, 1802; February 11 and April 28, 1803.

42. *Alexandria Gazetteer*, January 27, 1800.

43 *ibid.*; see also, December 18, 1865, *Alexandria Legislative Petitioner*, LCV.

44 For example, of the nine original bank directors (see note 34), all but Wilson and Hodgson were original investors in the Potomac Company, see Appendix 2.

45 General Meeting of August 6, 1794, *Records of the Potomac Company*, Letter Book, 1793-1796; National Parks Service, Record Group 78, Meeting of Directors, April 3, 1796; General Meeting of February 8, 1798; Meeting of Directors, September 17, 1803; October 28, 1803; September 30 and December 13-14, 1804; General Meeting of August 5 and Meeting of Directors, December 3, 1805. *Records of the Potomac Company*, Proceedings, 1793-1805; National Parks Service, Record Group 78; National Archives, Washington, D-C (quarter 204). See also Chapter 2.

46 Meeting of Directors, December 3, 1804. *Little River Turnpike Company*, Record Book, 1801-1812, LCV. 20; *Alexandria Daily Advertiser*, December 18, 1804; Thompson to Bernard Peyton, November 28, 1817; *Little River Turnpike Company Correspondence Reports* ca. 1805, 1814, 1817, 1819-1820, LCV. See also Chapter 4.

47 "Report of the Joint Commissioners, on the Navigation of the Potomac River," *House and Senate Documents*, 1822-23 (Richard Thomas Smith, 1823): 18; December 8, 1823, *Fairfax County Legislative Petitioner*, 1794-1808, LCV; *Alexandria Examiner*, January 27, 1828; *Schweichart, Banking in the American South*: 7.

48 *Alexandria Advertiser*, January 8, 30: 11, 12 (quote), 15, 1788 (quote); and *Columbian Mirror and Alexandria Gazette*, January 13, 1788.

49 For a similar argument, see Edwin J. Perkins who contends that in 1790s "ideological conflicts over the legitimacy of private chartered banking were less pronounced than in the 1760s." Though "partisan battles over banks continued at the state level... the debates typically addressed... practical matters, such as whether rival organizing groups backed primarily by Federalists or... alternatively, by Republicans could maneuver a charter bill through the legislature... and on what terms" *American Public Finance*, 175-181 (quote 175). On the growing political differences of the late 1790s see Richard Buel *Securing the Republic: Ideology in American Politics, 1789-1815* (Ithaca: Cornell University Press, 1972): 187-190; Lach A. Hunt *Federales to Democrats: The Federalists in the South, 1793-1800* (Lexington: University of Kentucky Press, 1968): 186-201; Nagard, *Cherrybark Politics*, 504-572; and Richard Brown, *The Old Dominion and*

*the New Nation, 1788-1800* (Lexington: University Press of Kentucky 1971), 118-208.

58. Lenczowski and others have vividly demonstrated that devotion to the allocation of credit was a cognitive pattern in all early American banks. see Lenczowski, "Bank, Bishop, and Economic Development," *ibid.*, 1; *Banker, Lawyer, Bishop, Personal Connections, and Economic Development in Industrial New England* (New York: Cambridge University Press, 1984), 11-53; see also Barbara Vetter, "Industrial Borrowing by the New England Textile Mills, 1840-1860: A Comment," *Journal of Economic History* 21 (June 1961), 315-328, and Beveridge, "Local Lending Practice."

59. Two of the proposed chairs are clearly identifiable as Republicans, two are Federalist, and two appear to be compromise chairs. The Republican list of January 12 proposed the following candidates: Samuel Craig, Richard Conway, Benjamin Dubois, George Gilpin, William Herbert, John Jenney, Francis Peyton, J.T. Roberts, and George Taylor. The Federalist list of January 15 proposed Richard Conway, John Pargensold, George Gilpin, William Herbert, William Hodgson, James Patton, J.T. Roberts, Joseph Thompson, and William Wilson. The board of Directors actually selected consisted of Richard Conway, John Pargensold, George Gilpin, William Herbert, William Hodgson, John Jenney, James Patton, J.T. Roberts, Joseph Thompson, and William Wilson. Thus, the stockholders selected all nine of the Federalist candidates while electing only five of the Republican candidates. More precisely, of the five candidates to appear exclusively on the Republican slate (Craig, Dubois, Jenney, Peyton, and Taylor), only one (Jenney) was elected; see *Alexandria Advertiser*, January 12, 15, 16, and 17, 1789; *Columbian Messenger and Alexandria Gazette*, January 20, 1789.

60. "Memo," *Alexandria Advertiser*, March 23, 1788.

61. December 5 and 16, 1789. *Alexandria Legislative Petitions*, LCV, see also "A Citizen," *Times*, and *Decrier of Columbia Daily Advertiser*, October 5, 1789. Similar petitions in support of the director's extension were forwarded from Loudoun, Frederick, Berkeley and Augusta counties. These petitions emphasized "the lower and more regular prices" which farmers received for their produce at Alexandria, and the ease with which bank notes could be converted into specie because of the bank. See December 7, 18, 1789. *Loudoun County Legislative Petitions*, 1778-1800; December 21, 1789. *Frederick County Legislative Petitions*, 1778-1800; December 2, 7, 18, 1789. *Berkeley County Legislative Petitions*, 1778-1800; December 1789. *Augusta County Legislative Petitions*, LCV.

54 "An Alexandria," *Times, and District of Columbia Daily Advertiser*, October 4, 1799–December 26, 1799. *Alexandria Legislative Petitions* LON

55 December 16, 1800, *Alexandria Legislative Petitions* LON  
*Alexandria Advertiser and Commercial Intelligencer*, January 14 and 26, 1801. *Journal of the House of Delegates of the Commonwealth of Virginia*, 1800 (Richmond: Meredith Jones, 1983), 27, 61, 68, 69, 76, 77, 78, 79, 78. *Shepherd Statutes at Large* 3:302. The assembly chose March 4, 1811 as the date of Alexandria's offering incorporation date because the incorporating act of the Bank of the United States was to terminate on that date. After 1800 Alexandria came under the jurisdiction of Congress, the charter of the BUS stipulated that the federal government could incorporate no other bank during its life. Thus, if the Bank of Alexandria was to be renewed by Congress, it could not occur until 1811, see, Cole, *Banking in D.C.*, 2024

56 *Alexandria Advertiser and Commercial Intelligencer*, February 5, 1801. *Times, and District of Columbia Daily Advertiser*, June 10, 1801

57 Sawman, "Republican Reviewers," 11–13; also, "Federalist Political Economy," 150–162; and Mason, "Copyright Hope," 184. *Alexandria Express*, August 26, 1804; see also *ibid.*, December 6, 1804

58 *ibid.*, January 23, 1804.

59 *Shepherd Statutes at Large*, 3: 106–108. This was not the first attempt to establish a bank in Richmond. In 1792 the Virginia assembly incorporated the Bank of Richmond with a capital of \$400,000. However, the institution never opened because it failed to attract enough subscribers. See "Legislative Petition of Country Merchants, Traders, Farmers, and Other Citizens of the Commonwealth," *Speeches* (Richmond) 1792. *Shepherd Statutes at Large*, 13: 580–607, *Starnes, Sixty Years of Branch Banking*, 24

60 *Alexandria Daily Advertiser*, February 10, March 10, and July 22, 1804, *Alexandria Express*, March 5–June 23, July 3 and 17, 1804.

61 *Alexandria Daily Advertiser*, July 26; August 3 and 13 (not of print); 1804. *Alexandria Express*, July 26, 28; August 2, 1804; and January 26, 1805. Samuel Stedder, *Encyclopaedia, A Statistical Manual for the United States of America* (Washington: Printed for the Author, 1806), 181. Apparently, many northern Virginians accepted the bank supporters' arguments, the Fairfax petition was accompanied by petitions from Augusta, Culpeper, Fauquier, Hampshire, Loudoun, Prince William and

Westoverland counties, and the town of Alexandria, see, *Journal of the House of Delegates of the Commonwealth of Virginia*.....1825 (Richmond-Roman's Plowshare, 1866) 11, 12, 27, 33, 54, 80 (the vote was 65 to 50 against placing a branch outside Alexandria). See also: Timothy J. Minchin "The Origins of the West End and the Little River Turnpikes: Urbanization and Economic Change in Northern Virginia, 1780-1860," *M.A. Thesis*.....Washington State University, 1980, 44-50.

62. *Alexandria Express*, August 28 and September 5, 1866;  
*Alexandria Daily Advertiser*, August 2 and 21, 1866; December 8, 1866  
Fauquier County Legislative Petitions, LITF

63. For example, when Elizabeth Lee organized a "Virginia wedding" for her daughter, Fanny, in 1789 she asked her relatives in Philadelphia to purchase many items including the linen for the wedding dress, and the "Beyers" and "Pewee Porie" for the dowry. Lee assured her relatives that "what ever is sent will be run the thing" but stressed her desire that the items be procured "whiler" they were "to be had on good terms", see: Lee to Sarah Ann Collins January 7, 1790; Mrs. Charles Henry Mann Papers 1758-1817, NYA. Washington also purchased many goods in Philadelphia rather than Alexandria in order to save expenses, see, Washington to Tobias Lee, October 7, 1794, *Writings of Washington* 24, 363-365; and Washington to Joseph Anderson, February 5, 1797, *ibid.*, 25, 363-365, where he wrote: "Spence, Rhonda, Seythas, Nails, Nod rods, Iron plates for the mould boards of Ploughs, Bar iron, and most other things can be had upon better terms here [Philadelphia] than in Alexandria."

64. *Journal of the House of Delegates of the Commonwealth of Virginia*.....1825 (Richmond-Roman's Plowshare, 1866) 11, 33, 35, 38. Fauquier, Frederick, Hampshire, Jefferson, Loudoun, Prince William, Stafford and Westoverland counties all sent petitions. On the conservative management of the bank in its early years see: *Stearns, Sixty Years of Branch Banking*, 37-40.

65. *Alexandria Daily Advertiser*, August 21, 1864.

66. *Alexandria Daily Advertiser*, July 17, 27, 30 (articles of the association) 1864; *Alexandria Express*, July 16, 21, 25, 1864.

67. *Alexandria Daily Advertiser*, July 23, 1864; *Alexandria Express*, July 21, 1864.

68. The question of when limited liability was extended to the shareholders of chartered banks remains unsettled in the historical literature. Hammond, for example, takes the issue only in passing,

remarking that "personal liability became established only in rudimentary fashion with almost no formal advocacy and with very little formal recognition" *Banks and Politics*, 454. Davis explicitly states that early corporations bestowed limited liability upon investors, though he remarks that investors in the Bank of North America remained uncertain whether they enjoyed such privilege: *History of American Corporations*, 1-5, 2-45. Adams argues that the managers and members of private banks exercised "greater control in lending" than the directors of chartered institutions because of their "personal liability", *Finance and Enterprise*, 2. Surveying this historical and historiographical confusion, Porfano concludes that most early banks lacked "de jure" legal protection until the 1830s, but "de facto, American investors" were rarely "exposed to . . . personal liability." "In practice, few creditors of failed U.S. banks ever succeeded in recovering even a portion of their loans by proceeding against the personal assets of stockholders", *American Public Finance*, 186-127, 202-204. See also: Fennersmith, *American Commercial Banking*, 22; and Crane and Mary F. Hamilton, "Origins of the American Business Corporation," *Journal of Economic History* 3 (May 1943): 2-23.

48. On shareholder's limited liability in the Alexandria bank charter, see *Hening Statutes at Large*, 75-556.

49. *National Intelligencer and Washington Advertiser*, August 28 and October 2, 1804. The articles were reprinted in the *Alexandria Examiner*, August 28 and October 6, 1804. The article printed in October was actually written August 29 but the editor of the *Intelligencer* delayed its publication because he did not want to unduly influence those considering subscribing to the bank.

50. *Alexandria Daily Advertiser*, August 28, 1804. The legislature passed the law against private notes in 1798, intending to end the circulation of Robert Morris's personal notes, see *Hening Statutes at Large*, 12-248-249.

51. *Alexandria Daily Advertiser*, August 28, 1804. Scrued Wodget made a similar argument in defense of the Bank of Potomac, see *National Intelligencer and Washington Advertiser*, September 29, 1804. See also *Reviewers' "Friedrich Political Economy"*, 292-281.

52. *Alexandria Daily Advertiser*, September 4, 8, 13, December 1, 1804, April 1, May 6, November 2, 1805; *Alexandria Examiner*, September 2, 14, 17, 1804, March 26, May 2, November 4, 1805; "History of Columbia Bank," *American State Papers, Miscellaneous*, 2-46. The original directors were Jacob Hiffman, Ebenezer Janney, Cuthbert Powell, John C. Ladd, William Hartshorn, James Patton, James B. Hunt, Joseph Kiddle, James

Smith, Jr / William Fitzhugh, William Rodgers and Robert Young. Thomas Powell served as the first president. All but William Fitzhugh were prominent Alexandria merchants.

74. Shepherd, *Statutes at Large*, 3: 128, *Journal of the House*, 1808, 12: 35-72, 84, 90, 143, *Alexandria Reporter*, January 30 and February 16, 1808

75. December 9, 1805: Fairfax County Legislative Petitions, LCV. The following petitions were attached to the Fairfax County petitions: December 4, 1805: Prince George County; December 1, 1805: Prince William County; December 9, 1805: Stafford County; See also: December 11, 1805: Frederick County Legislative Petitions; January 9, 1806: Loudoun County Legislative Petitions; and January 8, 1806: Miscellaneous Legislative Petitions, 1792-1813. LCV, *Journal of the House of Delegates*, 1805, 46 (which identifies the seventh county as Augusta)

76. December 18, 1805, *Alexandria Legislative Petitions*, LCV

77. *Journal of the House of Delegates*, 1805, 7: 25, 38, 48, 53, 57, 68, 69, 82, 84, 85, 90; *Alexandria Reporter*, January 23 and 27, 1806; Powell to Starr Powell, January 22, 1808. "The Lewis Powell Correspondence," *The John F. Branch Historical Papers of Randolph-Macon College*, 1 (June 2001): 258-268

78. "District of Columbia Banks," *American State Papers*, Miscellaneous, 3: 46-47, 147. *The Statutes at Large of the United States of America, 1750-1845*, 5 Volumes (Washington: Gales and Seaton, 1845), 2: 697

79. Welch, *Early Banks in D.C.*, 128-130, 132-134. Cole, *Banking in D.C.*, 37-38. Banking reported in Alexandria in 1808. *American State Papers*, Finance, 3: 304, 648-649. The five new banks were the Farmers Bank of Alexandria (1811), the Mechanics Bank of Alexandria (1812), the Merchants Bank of Alexandria (c. 1813), the Franklin Bank of Alexandria (1817), and the Union Bank of Alexandria (1817)

80. William Gough was the most prominent catchall from earlier era, *History of Paper Money and Banking*. Welch, *Early Banks in D.C.*, 56-58, 101. Cole, *Banking in D.C.*, 588, 589

81. *Alexandria Daily Advertiser*, September 12, 1808

CHAPTER 7  
"TO ENCOURAGE THE PROMOTION OF USEFUL KNOWLEDGE":  
TECHNOLOGICAL INNOVATION AND AGRICULTURAL REFORM

In late November 1788 a group of prominent northern Virginia merchants and planters gathered at Wren's Tavern in Alexandria to establish "a well-regulated Society" that would stimulate "a general spirit of enquiry" in "the most proper objects." The goal of the Alexandria Society for the Promotion of Useful Knowledge - its "system" as one correspondent put it - was to "promote" the acquisition and dissemination of "useful knowledge" in a broad range of subjects including "Natural Philosophy, the Arts, and Agriculture."<sup>1</sup> Though short lived, the Society's formation reflected a broad interest in technological and agricultural innovation which captured northern Virginia in the wake of the American Revolution. Like their counterparts throughout the nation, the region's inhabitants believed that independence and the liberty it promised offered new opportunities to exploit the resources of the nation and develop technological solutions to the economic and social barriers which obstructed the progress of regional prosperity and national greatness. Thus, a central component of the "pioneering spirit" which swept northern Virginia in the early Republic was a growing interest in new technologies, mechanical invention and

agricultural innovation. Equally notable, the region was also home to a number of "progressive" agricultural reformers and inventors whose discoveries put the region at the forefront of technological innovation in the early republic.<sup>3</sup>

Little of this, however, has registered with historians of American technology or the American South. In recent years historians of American technology have urged fellow scholars to update technological innovations "in context," to drop the discipline's traditional preoccupation with the design characteristics of technology and pay more attention to the social and cultural contexts that gave rise to these technologies.<sup>4</sup> This change in focus has led to admirable studies of early American technology in the northern states, but historians of technology—with a few notable exceptions—have tended to ignore technological developments in the South.<sup>5</sup>

They could reach no other conclusion: historians of the South have long emphasized the region's technological backwardness. According to the dominant scholarly view of the slave South, no social group within the section could act as a fulcrum for technological innovation. Slave ownership generated antitechnic conventions and reactionary social attitudes in the planter class who dominated the region politically and culturally. The slave labor force, their social status fixed forever, developed a distinctly preindustrial work ethic and aesthetic, uncomminuted innovation. Thus, scholars argue, slaves worked at a deliberate pace, ignored illness, broke all

but the simplest tools, and needed constant supervision. In addition, the association of slavery with physical work generated contempt among whites for all manual labor. Social stratification and slave labor also stifled the growth of a significant class of white artisans, the source of most technological innovation in the northern states. Finally, the region possessed a large segment of impoverished, peonish farmers who rather than planter status or new slave society as peripheral to their own interests and thus failed to question its existence.<sup>10</sup> In this "context," historians of technology and science have concluded that "for economic, sociological, or ideological reasons, the South 'never developed . . . anything paralleling the Yankee inventor.' With 'caste, family, slavery, and probity . . . the dominant forces in the social order,' the South lacked a vibrant 'intellectual heritage' that could generate interest in and provide continuing support for technological and scientific endeavors."<sup>11</sup>

In the three decades after the Revolution, however, northern Virginia did not follow this pattern of intellectual indifference. Instead, the region's inhabitants enthusiastically embraced technological innovation and agricultural improvement. The Alexandria society provides a good example of the interests and motivations of the region's intellectual enterprise. Like early northern learned societies, the membership of the Alexandria society was composed of "gentlemen," "whose characters and talents" were "sufficient to support its dignity and usefulness." The president of the

society, the Reverend James Blair presided over the town's Presbyterian church and ran a local academy. The vice-president, Charles Sumner, was a prominent merchant and attorney who would later serve as collector of customs for the port and town mayor. Robert Means, Alexandria merchant and a future banker, served as treasurer. The committee of correspondents consisted of Samuel Benson, the printer of Alexandria's newspaper; Bushrod Washington, George Washington's nephew, attorney, member of the Virginia House of Delegates, and future justice of the Supreme Court; Charles Lee, brother of light-house Harry Lee, customs collector for the port and future attorney-general and Supreme Court justice, and the Reverend William M'Whorter, an Alexandria schoolmaster. Of the original forty-four members, twenty-three (52 percent) can be identified as merchants, thirteen (30 percent) as professionals, and five (11 percent) as planters (the occupations of these members can not be established). In short, the society attracted men distinguished by their professional and educational accomplishments, persons very much like those who joined learned societies in the northern states.<sup>17</sup>

The Alexandria society also shared in common with its northern counterparts a patriotic and utilitarian orientation. The acquisition of knowledge was not a goal in itself. Rather, as society member Lutherell Lee pronounced in a 1790 address, in a new nation as "infant" and "weak" as the United States learning should "benefit . . . the country." Patriotism

demanded that science be employed to develop the nation's economic and cultural life. The dissemination of practical knowledge by learned scientists he continued, would have "the most happy effects" on America, leading "the way to plenty" and providing "a never failing foundation of liberty and peace." In Virginia, Lee concluded, the "Science" of the "greatest consequence" was agriculture. Thus he urged the society to patronize and bestow its honors "on the truly worthy cultivators of the earth."<sup>10</sup>

A year later, Russell Goodrich, Yale graduate and teacher at the Alexandria Academy, returned to the same theme. He advised Virginians to embrace "modern times" and abandon the culture of tobacco for wheat. "The cultivation of wheat," Goodrich argued, "infuses of farming to its highest perfection." "Let our Planters become Farmers," he implored, and "our improvements [will] excite universal excitement." But there was a catch. Wheat, Goodrich maintained, could not be cultivated by slaves because they "will never give the attention necessary for success." The transition to wheat could be made only if Virginians freed their slaves. No record of the reaction of Society members—most of whom owned slaves—survives, but Goodrich's ideas about slavery were most seriously unpopular. In a region where farmers were in the process of shifting to wheat without any reduction in the slave population, his advice did not meet any utilitarian or patriotic standard. Such ideas, however, certainly were

dangerous. After Goodrich's address there is no record of the Alexandria society ever meeting again.<sup>2</sup>

This did not mean, however, that interest in science and the "arts" disappeared. In fact, in the fifteen years after the society's demise in 1781 northern Virginians established a number of cultural and intellectual institutions. Perhaps the most notable was the Alexandria Library Company, established in early 1786. After collecting "upwards of one thousand Volumes," thirty-two Alexandrians petitioned the Virginia legislature for a charter in December 1785 "with the Hope of rendering" the library "a credible and beneficial Institution." The legislature responded favorably, and in February 1786 the company members elected a president (Reverend Murr) and twelve directors, two of whom (Robert Mease and John Giff) had belonged to the town's learned society. Under Murr's direction the Library Company obtained a new charter in 1788, but attracted little public notice aside from the yearly elections for a president and directors.<sup>3</sup> More practical for an agrarian region was the Washington Society for the Promotion of Agriculture, established in early 1788. An era writer to *Alexandria's* Republican paper noted "this was an institution from which "great benefit will be derived." By 1800 the town could also boast of a Dialectic Society and in 1788 attempts were made to revive the learned society. In the same year an entrepreneur proposed organizing a university

the "Columbian Gallery of Arts," patterned after Charles Wilson Peck's celebrated Philadelphia institution.<sup>17</sup>

The museum scheme, though it never came to fruition, reveals the ongoing circulation of external cultural trends. In stressing the acquisition of utilitarian knowledge, northern Virginia's growing number of private academies likewise reflected the intellectual preferences of the new nation. Americans, argued one correspondent in the *Alexandria* newspaper, should "learn to be useful citizens." "The man who will . . . point out a new and profitable article of agriculture or commerce," he continued, "will deserve more from his fellow citizens" than "all the Latin or Greek scholars . . . in any age or country." Reflecting this sentiment, the Reverend M'Whar, who directed the *Alexandria Academy* from its incorporation in 1766, reported in 1780 that the school now offered a "mathematical class" which taught "Arithmetic in all its Parts, Book-keeping, Geometry, plain and spherical, Trigonometry, Surveying, and Navigation." Similarly, when John O'Farrell advertised for a school master to work in Martinsburg he stressed that the individual would teach "reading, writing, arithmetic, and book-keeping, with all the practical branches of mathematics," in addition to "improving in its present improved state." A concern for the welfare of the political nation also played a role in the creation of private academies. In their request for a charter from the Virginia legislature in 1797, the trustees of the *Charlottesville Academy* in Berkeley County argued that "well regulated

seminaries of Learning' were 'essentially necessary for the maintenance and prosperity of a republican form of Government.' They ensured 'that the *citizens* as well as the *governor*' remained 'well informed' about the affairs of state. In all, seven private academies following similar principles appeared in northern Virginia between 1796 and 1808. A prudent and patriotic people required a prudent and patriotic education.<sup>10</sup>

Perhaps more important than the region's institutional support of practical knowledge and technological innovation, however, were the informal reports which filled the public prints. Spurred by antismithian regional boosterism, and an antipatented desire to appeal to as broad a range of readers as possible, the regional printers scoured northern and southern publications to bring to the attention of northern Virginians the latest mechanical inventions and agricultural improvements. By this means, knowledge of the scientific and technological innovations which originated in Europe and the northern port cities quickly made their way to Alexandria and Winchester.<sup>11</sup>

For example, the regional papers reported the invention of new scientific devices both by Americans and Europeans. Richard Bowen, printer of Winchester's paper, praised the Boston inventor of New Haven Connecticut as one who 'shows the want of genius' for their newly designed reflecting telescope and microscope. Similarly, Samuel Hanna appended Englishman William Herschell's invention of a new telescope as

evidence that Americans lived in an 'age of improvement'.<sup>11</sup> More often, however, the press described practical and useful innovations, rather than purely theoretical advances. Thus, the 'ingenious' mechanic who designed new coal-making machines, steam-driven saw mills, and printing presses, and who devised extensive methods of paper making, clock making, tanning and brewing all garnered widespread praise and free publicity in the local press.<sup>12</sup>

Reflecting northern Virginia's dependence on overseas commerce, the public press followed attentively innovations in maritime technology. For example, Alexandria newspapers promptly reported the improvements John Snyde of Southwark, England made to Hadley's Octant. Snyde's redesign of the navigational device enabled mariners to take accurate measurements on foggy or busy days when the horizon was obscured.<sup>13</sup> Similarly, accounts of newly invented ship pumps and ventilators received extensive coverage. Highlighting portable pumps on the last occasion of the West India and southern Europe, the merchants of Alexandria used to profit from any technological innovation which promised to preserve their cargoes longer.<sup>14</sup> No doubt, Alexandria ship owners and builders were also intrigued by John Gresham's improved dry dock, an invention which would facilitate the construction and repair of vessels and which Gresham exhibited across the Potomac in Washington. Perhaps most ingenious, however, was Nicholas Bessmer's 'Rotomond Horse and Ship Steam Ketcher'.<sup>15</sup> Bessmer recently

arrived in Alexandria from New York City, promised that his patented device would make a "great saving of fuel" by simultaneously sealing meals, heating living compartments, and boiling salt water into drink water aboard any vessel.<sup>10</sup>

The region's papers devoted even more space, however, to reports of newly invented machines for producing and processing agricultural staples. Though interest in farming implements often transcended the needs of local farmers—for example, innovations in cotton processing (both ginning and weaving) received considerable attention<sup>11</sup>—machines which promised to aid directly the region's agriculturalists received the greatest notice. As northern Virginia's farmers turned increasingly to grains, interest in implements which boosted productivity grew substantially. Every step in the production of northern Virginia's new staple crops, from preparing the soil for planting to processing the grain for shipment, could, it seemed, benefit from the introduction of new tools. Prior to the Revolution Virginia's farmers and planters were infamous for their poor farming techniques, particularly their neglect "in properly preparing their lands." Plowing, writes historian Harold Gill, "was not much more than scratching the surface of the ground, disturbing the soil only three or four inches."<sup>12</sup> What farmers needed was a plow that could break the soil to a greater depth. In the 1750s and 1760s a number of individuals introduced improved plows. Most famously, Thomas Jefferson designed to determine

mechanically which moldboard shape and angle generated the best and most even. The design received accolades from the American Philosophical Society and a gold medal from the Agricultural Society of Paris. In Alexandria, however, Jefferson's plan generated little public attention. Instead a number of the town's retail merchants began selling Charles Newkirk's plow patented in 1793, and "most generally used by the farmers of New York and Pennsylvania."<sup>48</sup>

According to agricultural historians, practical advances in planting and harvesting tools remained limited before the 1830s. Most farmers believed the advantages of machine planting "to be slight" and continued to broadcast or drill seeds by hand. Still, some of a machine invented in Vermont which planted corn seed by opening a trench, dropping in the seed and covering it in "one operation" found a ready audience in northern Virginia.<sup>49</sup> Similarly, harvesting remained a manual operation into the nineteenth century, with cutters and scythes used to reap and mow wheat. As early as 1788, however, a Worcester newspaper described Baltimore mechanic Leonard Hadcroft's "machine for cutting grass" which allegedly enabled one man to cut five acres per day. Five years later an Alexandria newspaper reported that "an ingenious gentleman" in Philadelphia had invented a horse powered machine "of simple construction" for "Hay Making." And in 1804 Moses Costello "improved machine for cutting straw and hay &c." which promised to mow "grass or grain" by it "in regular

rides" and gather it "into chosen or one operation" received regional coverage. Though these early machines failed to perform as anticipated, it is significant that regional printers still considered them noteworthy.<sup>12</sup>

The most labor intensive step in grain production, however, was threshing, during which the farmer separated the grain from the husk. Before the Revolution farmers employed two methods. First, the farmer could bind the wheat. This involved beating the grain with a flail to loosen it and bind it to a handle and allowed to swing freely; and removing the stalk with a wooden rake. Alternatively, the farmer could employ animals to tread out the grain on an inclined wooden platform around which the animals were driven. Both left much to be desired.<sup>13</sup> Consequently, American inventors concentrated their efforts on constructing a workable threshing machine. The regional press regularly reported their efforts, including the threshing machine James Boole Burley presented the American Philosophical Society in 1784 and the model of a newly invented threshing machine which the Baron Tullius imported from Europe and demonstrated to George Washington in 1793.<sup>14</sup> Other designers of threshing machines who found a ready hearing in northern Virginia included Leonard Hatcher of Williams Forker of Richmond, Christopher Hoxa of New York and Solomon Dawson and Isaac Ott of Delaware.<sup>15</sup>

Innovations in boat building also attracted much attention in northern Virginia; farmers switched from wheat to grain. Oliver Evans, a

Bellevue millwright revolutionized flour milling in the 1780s with the invention of his "horizontal" mill, which used the power of the waterwheel to integrate into one machine process all the steps involved in flour milling. Evans's mill lessened dramatically the amount of manual labor needed to produce flour and thereby enabled millers to begin large-scale milling operations. Reports of Evans's mill reached northern Virginia in 1798 and elicited high praise. Evans "was success achieved, had shaped 'immense vapors ... to the power of man's inventive faculties.' By replacing 'manual labor' with machinery, the report continued, his mill produced 'the greatest advantage to a young country whose hands are wanted.' The simplicity of Evans's design enabled millers to duplicate it, so that his invention 'became standard within a few years.' In northern Virginia, the publication of Evans's handbook *The Young Miller and Millwright's Guide*, advertised in Alexandria within months of its publication in 1798, boosted the millmaker mill's popularity. Evans's instructions played a critical role in northern Virginia's vast increase in flour production, as local millers constructed makeshift mills following his designs. After Evans, Americans could readily claim that "wheat is manufactured" in the United States "better than in any part of the world."<sup>17</sup>

Northern Virginians, then, were fully integrated into the national life of the early republic. The inhabitants of the region carved themselves an integral members of a prosperous and innovative people. They shaped

almost of and celebrated the technological and mechanical advances which seemed to issue from the workshops of ingenious mechanics throughout the new nation. And if the rapidly agrarian economy directed the primary interests of most residents towards mechanical devices which aided farming and the processing of agricultural staples, then this was a preoccupation shared by the vast majority of Americans. James Madison noted a truism when he uttered before Congress: "Agriculture . . . ought to be considered the great staple of America." Reflecting the same sentiment in 1768, farmers reaping "sheafs of wheat" led the procession of tradesmen at Washington's annual July 4 celebration. Even Trade Congress, the foremost booster of American manufacturing, acknowledged that agriculture was "the great leading interest" of the nation from which "most of our other advantages result." Most Americans assumed that national greatness and individual success depended on a flourishing agricultural sector.<sup>10</sup> In this environment, efforts to improve the methods of American farmers became a principal feature of American intellectual and cultural life in the early republic. For their part, northern Virginians eagerly joined the national preoccupation with agricultural improvement.

The region's farmers found a persistent barrage of general advice and specific suggestions for improving their farming techniques and output. In this 'more advanced' era, counseled one writer: "beware not . . . the agricultural practices of your forefathers" but pursue "husbandry of the most

improved land." Advice about "improving" farming came from a variety of sources. Just as Americans transferred industrial technology from Europe, they also regularly translated and described the findings of Europe's gentleman farmers and scientific improvers. From Italy came a report that grains of wheat fermented before sowing "produced about 15 Bush" each. In the 1780s after Vignocchi's wheat crop became infected with the blight, his farmers switched instantly to resistant varieties of wheat. One correspondent suggested "Turkey wheat" and "Turkey wheat" (hard and tender wheat) from Italy, which were he claimed less susceptible to vermin. Another correspondent recommended the use of "Turkey wheat" from the Levant, arguing that it was both more productive and more resistant to the fly.<sup>10</sup>

From France too came a variety of suggestions for improving the region's farming methods. "One of the best experimental farmers in France" the Count of Chermay reported a *Windsor* paper in 1786, had successfully cultivated a "new vegetable" that he used as cattle feed. The crop, the report continued, grew quickly and the cattle produced "excellent" milk and butter. Similarly when a French farmer named de Thour discovered that "oil of turpentine" applied to lambs and their teats destroyed "vermin" and "insects," his findings found a attentive audience in northern Virginia.<sup>11</sup> The most popular French source for agricultural improvements, however, was the farmer's manual *l'Agri-culteur*. Of the

*Farmers' Pocket Dictionary*, which appeared periodically as the regional press. To "multiply the Increase of Corn of any Kind," "prevent the Corn in Wheat," and "prepare Seed to be sown on your sandy lands" the manual instructed farmers to treat their seed in various solutions—mixtures of water, animal dung, salt-petre, lime, and pot-ash—before they planted it. Treated seed, the manual argued, started growing sooner, produced a larger crop with less seed, repelled birds from feeding on the seed, and produced plants which resisted "blight, smut, or mildew."<sup>12</sup>

Significantly, excerpts from the book were also reprinted in the 1751 *Encyclopaedia, Britannica, Maryland, and Virginia Almanack*, sold by *Alexander, publisher Boston and New*. The almanac was the most popular literary form in early America. In seventeenth-century New England, these "useful" books were "much prized." Their readership "not across their lanes," and they "reached perhaps a wider audience than any other book except the Bible."<sup>13</sup> They were as less popular in eighteenth century Virginia where their cheapness permitted most "planter families" to own one. Filled primarily with moral platitudes and sentimental tales, almanacs rarely included "practical advice for farmers."<sup>14</sup> The decision to include excerpts from the *Agrotopia* in the 1751 almanac thus reveals a growing interest in new agricultural techniques. Equally important, the inclusion of such information revealed that the idea of improvement reached farmers still attached to traditional farming methods.<sup>15</sup>

Though the popularity of French agricultural writers grew in the 1790s and 1800s, most Americans still looked to Great Britain as the center of scientific innovation and technological advance. Improved agricultural techniques had first been introduced in England and British agricultural writers continued to explicate new methods and systems. For example, a correspondent to an Alexandria paper praised *The Shepherd's Calendar*, an agricultural treatise written by the Scottish parson and gentleman scholar Lord Kames, for "containing the most improvements in the English compass and being the best adapted to the soil and climate of the United States." Kames advised farmers to manage regularly, rotate crops and deep plow. Similarly, Englishman James Anderson's "most useful" advice on dairy farming found a ready spot in the region's newspapers. The inclusion of Anderson's suggestions reflected both a rising interest in improved farming methods and increasing agricultural diversification in the region.<sup>20</sup>

The most popular English agricultural writer, however, was Arthur Young. A number of Young's voluminous writings on improved farming made their way into the public prints of northern Virginia. As early as 1758 an excerpt from Young's *A Six Weeks's Tour Through the North of England* (1771) advocating the cultivation of cabbage appeared in a Winchester newspaper. For English improvee like Young the cultivation of root crops such as cabbage and turnips was but one component of a broader effort to establish an integrated system of improved farming consisting of

regular crop rotation, deep plowing, and the use of artificial fertilizers. Over the next few decades Young's ideas on a variety of subjects – the effectiveness of dung as a manure, the best varieties of clover and grass for replenishing the soil, how to prevent the infestation of the "wheat" or corn and the reasons for its wheat – appeared in the region's newspapers. Gentlemen farmers read his work with regularity and in 1794 George Washington began a correspondence with Young which eventually made its way into print in an *Alexandria* newspaper in 1802 and as a book published by Alexander printers Collins and Sawney in 1811. As historian Rodney Loefer has noted, American farmers held Young "in high regard," believing that he "did much to help spread knowledge of better farming practices."<sup>11</sup>

Still, a number of improving farmers questioned the relevance of much of the counsel proffered by English reformers such as Young. Jefferson, for example, concluded that Young wrote "mainly for money," that his works were "superfluous" and "mainly worth reading." Reformers also noted that Young had little comprehension of the peculiar conditions faced by American farmers. Richard Patten, the gentleman farmer to whom Washington turned for a description of Pennsylvania farming methods, explained that in contrast to British farmers who found labor cheap and land expensive, Americans enjoyed relatively inexpensive land prices but high labor costs. As a result, many farmers "think it better to sell, and remove to places where Nature is at her point, leaving to their successors

the soil, cultivation, and expense of manuring lands exhausted by bad tillage.<sup>17</sup> This did not lead reformers to conclude that all improvements should be abandoned by American farmers. Peters himself authored a treatise on the efficacy of plaster of paris. However, specific English methods were not entirely applicable—or profitable—in the American setting.<sup>18</sup>

Consequently, northern Virginia's farmers found American sources of agricultural information increasingly commonplace. The growing regard for the advice of American writers also reflected and fueled the nationalism of the era. A truly independent nation must possess its own advocates of improved farming: practical farmers who devised innovative solutions to the nation's particular problems. Nevertheless, some foreign advice remained, as when "N" advocated that Virginia farmers begin cultivating grapes, and "G. D." recommended the planting of mulberry trees in order to promote the production of silk. In a more practical vein, the local press discussed writers who instructed farmers to diversify their output to include wool, flax, and root crops, or provided advice on how to increase the production of cream, milk, and honey cultivated in Virginia primarily for household use.<sup>19</sup>

More frequently, however, local printers chose articles which offered practical advice intended to increase the profits of northern Virginia's staples. For example, many papers made recommendations to enhance the fertility of American soil. One writer suggested that farmers should raise

deep as worn out from land. Such land would be "recovered, and rendered fertile for as many as more favorable to land than that which comes from sheep." A more international suggestion came from Richard Patten who recommended "Deep Trench & frequent ploughing" to restore depleted land. Other writers suggested growing clover on worn-out lands. Clovers, they argued, had multiple benefits. Not only did it "incubate the soil and prepare land for wheat" and other grains, but it also enabled farmers to make two-thirds harvest. A few writers praised the restorative power of root crops such as turnips or potatoes. When these methods failed, reformers suggested a variety of soil additives, including ashes, "straw of buck wheat" and "peas and beans;" the husks and cobs of Indian corn, and the "sprinkling of lime and hemp." More frequently, farmers were urged to add plaster of paris to gypsum to their soil. To the agricultural reformers of the early republic, the power of gypsum to replenish the soil and increase yields seemed limitless. Patten they argued "did wonder in American agriculture." Their enthusiasm for the additive remained high even when more sober reports concluded that farmers should study the chemistry of different soils to determine the most effective remedy.<sup>20</sup>

When the humanly attached northern Virginians' wheat crops the local press described crops by American farmers who claimed to have successfully controlled the pest. Though to return to Virginia, including William Stockland in 1821 and Isaac Weld in 1796, stated that Virginia

farmers "scarcely knew this insupportable animal," local accounts told a different story. As early as 1778 David Gridgale, serving with Washington's army in New York, learned that "London parties of the Destruction committed by the Wived [sic]." Washington recorded that the "Fly appeared to be getting into the Wheat" at Mount Vernon in October 1784. Farmers denounced the fly in the Shenandoah Valley in September 1788 and by June 1820 reports revealed that the insect was "committing dreadful havoc amongst the wheat in many parts of the country."<sup>10</sup> American reformers, however, failed to devise an entirely satisfactory method for combating the fly through two primary remedies accepted. First, many writers suggested alternative wheat varieties. Wheat breeders yellow-headed and red were wheat such had their proponents who asserted that they resisted rust and thereby escaped the attacks of the fly and other blights such as rust and smut. The other primary remedy was to soak the seed in a variety of solutions before planting. Treating the seed with "quick lime," a brine solution, a "decoction of elder" leaves and branches, or most simply, "clear water" for twelve to eighteen hours would, reformers advised, save seed from the fly and other blights. After soaking, grains could be kept free from smut and rust by late drying.<sup>11</sup>

In short, America's northern Virginians were familiar with the latest agricultural innovations advanced by American reformers. More striking still, improving farmers of the region actively contributed to the national

contribution. The paper contained frequent contributions by local writers interested in improving the agricultural practices of the region – and the nation's farmers. For example, James Douglass of Guilford Falls in Franklin County recommended his use of gypsum on his wheat fields. Though he contended that he did not understand how plaster of Paris worked, his "experiments" had convinced him that it was "one of the most efficacious remedies" to "enrich and strengthen the exhausted soil." He also recommended that farmers prepare wheat seed by soaking it in clear water ready their wheat fields with crops of clover, and let the land lie fallow every fourth year. An anonymous local writer urged farmers to employ "sawdust-as-a-manure." When mixed with "dung and earth," he argued sawdust destroyed "slugs and vermin of every description," particularly when "sown upon young wheat in the spring."<sup>10</sup>

Thomas Ewell, a Virginian by birth and graduate of the University of Pennsylvania medical school who resided across the Potomac in Georgetown, suggested yet another soil additive: "finely powdered pea coal." Ewell argued that experiments he had undertaken proved that "pulverized coal" "quickened" the "vegetation of corn and wheat" more than any other fertilizer, including horse manure, gypsum, and ashes. Moreover, because pea coal was "found in so many parts of the country" it "must be cheaper than any article used as a manure." The use of coal, Ewell concluded, would enable "my fellow-citizens of Virginia" to manure "large tracts of

their unprotected lands." Another Georgetown resident, Thomas Mann, wrote a lengthy article describing how to plant and cultivate these hedger to protect cultivated fields. He also claimed that they provided a more permanent and economical barrier to livestock than the temporary fences presently in use. Ultimately they would save the "national economy from five to ten millions of dollars" and "may save many a farm from being deserted." On a more practical level, one practical-minded inhabitant of Alexandria, disturbed by the "accumulated filth" in the city, recommended collecting the efflu from the streets and giving it to "neglecting husbandmen" to "fertilize their lands." This simple step would help beautify the town and aid the improving farmers of the region.<sup>12</sup>

Some local reformers, seeking a broader audience, published their findings as separate volumes. John Taylor of Caroline, for example, first published his political and agrarian reform tract, *American*, as a series of articles in a Georgetown newspaper in 1810. He later collected them into a book printed in 1820. Less famous, but an less indicative of northern Virginia's interest in agricultural improvement, was a short pamphlet written by George Beale of Frederick County in 1808. Beale acknowledged he possessed "no advantages of education," lacking in particular a "knowledge of the science of chemistry." However, he claimed the success of his "experiments" in "verifying" his lands system capable to make his "soils richer." Indeed, he believed it his "most important duty" to share his

agricultural "disaster" and "render himself as useful a citizen as possible." Bold contended that salt "properly used," had "an astonishing effect on both the soil and grain." Bold's "wondering effects," he asserted, were "so great" that "in the course of three years" lands treated with it "would produce four times as much as they were accustomed to produce prior to its use." Bold believed that salt was even more effective than plaster of paris. In contrast to gypsum's "fickle and precarious" effects on certain lands, salt suited "all soils and seasons," and when sown with plaster increased its efficacy. In addition, salt raised the yields of a variety of crops. In his experiments, Bold found his wheat, corn, tobacco, flax, hemp, cotton, and potato crops all greater after employing salt.<sup>20</sup>

Bold's small pamphlet attracted little attention. In contrast, contemporaries celebrated Loudoun County's leading reformer, John Brame who published his *Treatise on Improved Farming* in 1838. Jefferson, for example, reported that the "example" of Brame's "husbandry" had transformed Loudoun. Where once the county's soils had been "exhausted & wasted by bad husbandry," they had now become some "of the most productive" in Virginia and sold "at the highest prices." Born in 1761, Brame was the eldest son of Loudoun's county clerk, Charles Brame. In 1793 Charles gave his son 128 acres of land located in Loudoun. By 1797 John owned six slaves, six horses and ten cattle. After improving this tract, Brame sold it in 1799 and bought a larger farm in Loudoun which, he reported, "was more

soil" at the time of his purchase. Over the next few years Bunn specialized in Loudoun County land and worked to increase the productivity of his new farm. Ten years later neighbors pronounced Bunn's laborer a master: this "plain farmer" had "made himself tolerably rich by his farming alone."<sup>22</sup>

In his book Bunn recommended three major changes in the practices of northern Virginia farmers: the heavy use of gypsum; the regular rotation of wheat and corn crops with clover; and deep plowing. Of the three, the remarkable effects of plaster of paris most impressed Bunn. He pronounced it "the best and richest [manure] in the world," relatively inexpensive and the "most permanent" in its effects. The transformation gypsum had effected on the farms in his neighborhood would, Bunn argued, "astonish any man who had known them before the use of plaster." Corn yields per acre had nearly doubled, while wheat production had increased three to four times. Bunn's own wheat crops were so "luxuriant" he had trouble finding laborers to cut his fields at six shillings per day, two shillings more than the standard daily rate. In the Calverton Mountains in western Loudoun County, land which once yielded only ten to three bushels of corn and five to ten bushels of wheat per acre produced, six to eight bushels of corn and twenty to twenty five bushels of wheat after being treated with gypsum. Properly applied, this gypsum promised to transform the soil of Loudoun County and make it "equal if not superior to any . . . in the United States." Of equal significance, when properly mixed with wheat and corn,

and plow protected them from locust swarms and the horned fly. Benson treated the detailed instructions regarding horses needed to apply the fertilizer on their lands.<sup>12</sup>

Gypsum was even more effective when used in conjunction with red clover. "a vegetable of vast more importance, than is generally ascribed to it." Every third year Benson recommended that farmers grow clover sowed by gypsum, on their wheat fields. Clover acted "as an excellent coat of armor," helping to retain the soil and protect it from frost. Equally important, it provided "the best pasture for raising healthy livestock of every kind." Clover, Benson continued, produced "better" cattle feed, "when properly mixed," the best hay. Likewise, the milk and butter of "such cows" raised on clover was "of superior flavor, and appearance, and will keep pure longer."<sup>13</sup>

The final plank of Benson improved agricultural system was deep plowing. For too long, he argued, Virginia farmers had plowed only a few inches into the soil and as consequence had lost valuable top soil with every heavy rain. Deep plowing reduced the loss of top soils, introducing "softer" earth which was "less liable to the effects of hard dashing rains." Moreover, deep plowing "wounded the ground," for "it brought into action" more moisture and "burst various parasites" of which the earth usually supplied by the harmful hand of Providence.<sup>14</sup> In time, locusts labeled Benson's agricultural regimen of gypsum, clover and deep plowing the

"Lowland System" and it became so "popularly known" as northern Virginia as the Norfolk system of farming in England.<sup>1</sup> Even that in 1848 but other Lowland farmers – most notably Jereb Denney – continued to follow and publicize his methods.<sup>2</sup>

Confronted almost daily by the national discourse with agricultural reform, northern Virginia's *lowland* farmers most certainly acquired some exposure of the latest improvements disseminated by European, American, and local writers. At the very least, the region's farmers could not avoid the *idea* of agricultural reform. However, a larger question remains: Did a significant proportion of northern Virginia's farmers actually implement these reforms? Unfortunately, that question is not easily answered. While historians have described the attempts made by Virginia's wealthy planters in the early republic to extend the agricultural habits of the state's farmers and distribute information about improved methods, they generally agree that the new ideas did not reach the "farming masses."<sup>3</sup> Most farmers, historians contend, remained resistant to change, continuing to follow traditional "old-fashioned" methods of husbandry. *Asa Green's* 1828 judgment that agricultural improvement failed before "its enemies widely influential"<sup>4</sup>

Northern Virginia's farmers often exhibited skepticism about the new farming methods. Confronted by a writer of suggestions, some officers were decidedly not: many farmers simply persisted in their traditional

business. Such conservatism consciously earned praise; one contemporary estimated farmers not to abandon their "present practices for others however promising until . . . the new process . . . [is] profitable for the encouragement of their own soil."<sup>14</sup> Likewise, Stuart filled his treatise with stories of local farmers who scoffed at his ideas and disputed the veracity of his claims. His marshals were some masters of the best evidence that Stuart included in the second printing: numerous affidavits written by some of the leading individuals of the region (including congressmen Richard Brent and Alexandria merchants Jesse Taylor and Jonathan Smith) testifying to the accuracy of his statements.<sup>15</sup>

Nevertheless, there is a variety of evidence which indicates that a significant portion of the region's farmers adopted at least some agricultural innovations after the shift to wheat. Indeed, wheat cultivation itself seems to have generated improved methods. Agricultural reformers had long berated the state's attachment to tobacco culture, arguing that it exhausted the land and encouraged poor farming methods. Most famously, Jefferson labeled tobacco "a culture productive of infinite wretchedness." In contrast, wheat offered "plenty and happiness among the whole" population, preserved the land, and provided abundant foodstuffs. "Used judiciously with us," Jefferson continued, "consists in substituting Indian corn and tobacco" and replacing it with "small grains."<sup>16</sup> Happily, wheat could be profitably grown on worn out tobacco lands allowing farmers to

increase their output of wheat. And for many, greater production prompted the adoption of improved agricultural techniques. Contemporaries frequently noted an association between the production of wheat and better methods of husbandry. Where wheat predominated "people" appeared "more industrious," the land more fertile, and the country more prosperous.<sup>22</sup>

Burns noted a similar change in his neighborhood. In the 1780s locals had ridiculed his application of gypsum: cultivation of clover and decision to deep plow. Burns acknowledged that farmers' resistance was often quite rational. They required concrete proof of the Longden System's effectiveness before implementing it on their own farms. Burns provided it by turning his own farm into one of the county's most productive. Within a few years, many former critics had become converts. Ultimately, Burns found his greatest success in persuading local farmers to use plaster of paris. They came flocking to him to purchase it, though he was often unable to supply their needs. Alexandria merchants soon answered the demand. Burns obtained his own plaster in Alexandria, purchasing his first supply in 1781, probably from merchant William Wilson, who assured that he and his business partner, Alexander Campbell, had secured "Forty Tons" from New York. Reflecting the novelty of the technology, Wilson and Campbell added that gypsum was "particularly valuable as a manure, for

beach is being found sufficient for an acre of land, and it serves to reach the market well."<sup>10</sup>

Despite the efforts of Wilson and Campbell, in the 1780s Boston often found the region's supply of gypsum "imported from France or Nova Scotia, deficient." By the 1790s, however, an increasing number of Alexandria merchants began to sell it, and soon felt the need to elaborate on its efficacy. In the twenty years after Wilson and Campbell first offered gypsum for sale, some twenty-eight Alexandria firms began peddling it. Many merchants advertised repeatedly, and the amount of gypsum on hand also became increasingly large. In 1808 the firm of Janney & Patton announced they had over a thousand tons for sale. For the convenience of farmers, William Hartshorn sold plaster both by the ton and in ready-to-use granular form, which he ground at his mill and sold in barrels.<sup>11</sup> Alexandria merchants imported so much plaster in 1804 that the chief of police, Joseph Maudersville, complained that it was blocking the streets and ordered it removed immediately. The same year the local press began reporting the price of plaster at New York City ranged from 3d to 5d per sack, a reflection of the commodity's increasing popularity. Only the persistent demand of local farmers can explain the willingness of retailers to furnish a steady supply of gypsum.<sup>12</sup>

Local advertisements provide another indication of the extensive use of plaster of Paris. Then as now, actors of local theatres used to prevent their

property in the most flattering light. Consequently they generally furnished an account of all improvements they had made on their land. After 1800 these descriptions often contained details about the use of plaster and other manures, or they remarked upon the land's suitability for the fertilizer. For example, Jonathan Smith asserted that there was no land "in the state upon which Plaster of Paris answers better" than the 1200 acre tract he offered for sale in Fairfax County. Colin Auld made similar claims. He had, he noted, "verified" that his two tracts in Loudoun County (of 400 and 114 acres respectively) were "susceptible of the highest degree of improvement, by means of Plaster of Paris." Likewise, when Baldwin Bates sold a 300 acre farm in Fairfax County he made sure to mention that the previous tenant had left it "well plastered," and William Gossell, selling an 110 acre farm in the same county, emphasized that it was "thoroughly manured with Plaster of Paris."<sup>107</sup>

Still, not all farmers who applied gypsum to their soils had favorable results. Washington, for example, had little success with it. He began experimenting with the fertilizer at Mount Vernon in 1765, but found his grass not "benefited in the smallest degree by it." In the 1780s he told Bates, the Pennsylvania advocate of plaster, that his various trials had "always been unsuccessful." Yet, to the last month of his life, Washington continued to experiment with gypsum, apparently influenced by the good successes of other farmers. Solomon Bates of Loudoun County was less

expensive. Though he acknowledged that the wheat he had sown with plaster in 1804 "looks much better than wheat . . . sown better ground without" the fertilizer, his recent "difficulties" with wheat—overestimating his use of gypsum—had kindled "serious thoughts of turning every thing I have into Cash & establishing a Stock . . . in Salt."<sup>12</sup> Undoubtedly many small farmers failed to employ plaster because of its expense. This explains why many reformers suggested cheaper alternatives, and why even Burns acknowledged the limited efficacy of other, less expensive measures.<sup>13</sup>

Just about all farmers, however, could afford to cultivate clover or other grasses, the second facet of Burns's program. Northern Virginia's farmers revealed an early interest in the cultivation of self-seeding grasses: a tendency encouraged by the region's temperate climate in which grasses thrived. By the 1780s Alexandria merchants regularly advertised the sale of grass seed clover seed, and at least three residents made their living entirely as "seedsmen" selling "beast seeds" for clover, timothy, lucerne and a variety of other grasses.<sup>14</sup> In 1793 the local press began listing the market price of clover seed (11¢ per bushel) among the list of commonly sold commodities.<sup>15</sup>

More revealing, however, is official advertisements for properties both large and small located throughout the region. Such references to clover "manure" farmers invariably listed the fertility of those pastures seeded with clover or timothy grass, though they customarily represented only a

small percentage of the total acreage. For example, when Delphus Dore sold his 200 acre tract in Berkeley County he locally praised the twenty five to thirty acres of "valuable meadow ground." To the north in Frederick County Joshua Sengue noted that 200 acres of his 600 acre farm had been cleared, "well enclosed, well laid off in convenient fields." He added that a "large proportion" of the cleared land was "well laid down in clover, for which it is particularly adapted." East of the Blue Ridge in Loudoun County John Hanley stated that fifteen acres of his 100 acre farm consisted of "good timothy meadow." And in Fairfax County Moses Carter emphasized that his 200 acre tract contained ten acres "well laid down with Clover and Timothy." It would seem that at this point, at least, Bane was preaching to the choir.<sup>27</sup>

He appears to have had less success convincing the region's farmers to accept deep plowing. Though improving plowmen such as Washington experimented with new plows and numerous reformers—including John Taylor, Richard Peters and George Rabb—advised farmers to plow more deeply, there is little evidence that many did. A few merchants began selling Strickland's patent plows, but many farmers apparently agreed with the skeptical "old farmers" of Loudoun County whom Bane encountered. After deep plowing his wheat fields, Bane's neighbors observed what "a shame" he "should thus kill up our farms, and run a positive piece of land."<sup>28</sup>

Still, the increasing use of fertilizers (especially guano) and clover as a regular rotation represented a sharp break from northern Virginia's traditional agricultural practices. "Plaster and clover" wrote historian Lewis Gray, "worked a great transformation in the agriculture" of "northern Virginia . . . and the upper [and] Valley."<sup>10</sup> Prompted by the opportunities offered by a burgeoning world market for wheat and flour and by a genuine desire to enrich their lands, improving farmers adopted the new methods tested by reformers. Travelers such as Louis Well appreciated the change many farmers had noted: before "to see the sterility of wearing out their lands" by continuous cropping. He too did residents of the region Northern Virginia's "industrious farmers," Gray observed, had sparked the "improving state of agriculture now taking place."<sup>11</sup>

Equally significant, the seeds to which sparked a series of technological innovations by local artisans designed to meet the particular needs of grain farmers. For example, miller James Denonle responded to the changes in the region's agriculture by inventing and patenting a new mill and an improved threshing machine. Denonle resided in Dumfries, a small port located on Quantico Creek, twenty-five miles south of Alexandria, but he had strong business and personal ties to Fairfax County. His brother George Denonle was the Fairfax County clerk, and at different times he established partnerships with Alexandria merchants Hugh Denonle and James C. Denonle. James's ties to Alexandria were no doubt

motivated by Domènec Gorkau after the Revolution. Established as a tobacco town by Scottish factors in the early eighteenth century, the town never fully recovered when the tobacco trade declined in the 1780s. Still Domènec, the owner of Quatrecent Males located just outside Barcelona, believed to boost the town's economy. Most notably, he helped to organize the Quatrecent Company in 1791, and in 1796 he was elected a director of the company which over the next thirty years attempted unsuccessfully to make the creek navigable.<sup>10</sup>

Domènec continued the narration of his own tale in late 1800. Farmers had discovered that bats dying from shortly after harvest helped preserve it from the ravages of "northern flies" and the locusts. By Unfortunately, it was also an expensive and labor intensive process. Domènec claimed his bats was "truly superior to any thing of the kind now in use," drying the "Glean without injury to the whole, large or small," rendering it "capable of being kept without rotting almost any length of time," and preventing infestation by "the fly or weevil [sic], so troublesome and destructive." Equally important, the bats was operated "with but little expense or manual labour." To bolster his claims, Domènec's advertisement included supporting affidavits from local worthies James Smith and George Gilpin, "Gentlemen of respectability and reputed scientific abilities." Daniel Daughan, Alexander's four superior, testified that he had "inspected several hundred barrels of said \_\_\_\_\_ made from bats dried [sic] in said bats"

and had found them "entirely free from being smoked [sic]" Isaac McPherson, co-owner of the Georgetown Mills located south of Alexandria, added that with one of Desauls' kilsn he could "dry 500 or 600 bushels of corn each day and better than I ever saw corn dried [sic] on any other kind of kiln." Here, then, was an invention "which must become extensively beneficial to the community" of farmers in the region.<sup>17</sup>

Of course, Desauls hoped to renet more than just the local community. He charged forty dollars for "the privilege of using" the kiln giving the buyer "a drawing and explanatory notes" to enable them to construct their own. Whether Desauls ever turned a profit with his kiln is uncertain. However, his scheme could not have been helped by the June 1851 decision of the Virginia Mutual Assurance Society against fire in refuse insurance to new mills with attached kilns and to decline payment of claims on insured mills when the use of a kiln caused a fire. The company explained that "late experience" revealed that mills with attached kilns constituted an "extremely hazardous" risk "whether represented and contemplated" by the original insurance policies. Most certainly the company had in mind the fire that destroyed the mill of Alexandria merchant William Haristown in March. The kiln "which originated from a kiln used for drying corn" inflicted "very considerable" losses on Haristown. The Mutual Assurance Company responded by seeking to lodge similar future risks.<sup>18</sup>

Dewar's problems with the corn hills did not, however, halt his creative endeavor. Four years later he announced a new invention, a threshing machine, to aid the region's grain growing farmers. Dewar acknowledged that earlier threshing machines had not lived up to their expectations. His machine, however, was different. Powered by two horses and attended by two hands, Dewar claimed that his durable and easily repaired machine could thresh from fifteen to twenty bushels of wheat per hour and produce grain "worth to the manufacturer considerably more than that got out on the usual mode of threshing."<sup>1</sup> To bolster his claims, Dewar asked respectable local residents to testify on his behalf. Nathaniel Elliott, who now owned the Georgian Mills, provided the fullest statement. Elliott noted that he went to examine Dewar's threshing with skepticism: "having never seen or heard of one that answered a good purpose."<sup>2</sup> However, he was pleasantly surprised: "Contrary to my expectation, it did its work perfectly well having net a grain of wheat in the hands nor even any chaff in the grain."<sup>3</sup> Most important, Dewar's threshing separated the wheat without any of the "dust or dirt" which plagued grain prepared "on the ordinary mode of threshing with horses on the dirt."<sup>4</sup> In Elliott's opinion wheat threshed with Dewar's machine would receive "fit to fit get trampled more" than tumbled grain. In short, Dewar had devised an "excellent invention" of "great profit and utility to both the farmer and manufacturer."<sup>5</sup>

Still, it is doubtful that Denzels profited much. Though he charged \$50 for "patents to use" his machine (essentially a "drawing or writing" description), his patent offered little protection. The patent system in place after 1793 did little more than register new devices. The "inventor needed only to allege that a device was original," pay the required fee and issuance of a patent was "more or less automatic."<sup>14</sup> The patent office lacked discretionary power to reject applications for devices that did not work or obstructed existing markets. Instead, the onus was left to resolve the inevitable conflicts which arose between patent holders. As a result, numerous inventors—including Oliver Evans, Eli Whitney, and Robert Fulton—became embroiled in lawsuits and failed to capitalize fully on their discoveries. It has estimated that these "ingenious mechanics," Denzels faced the same legal hurdles.<sup>15</sup>

Perhaps more important, Denzels also shared with these more famous proprietors a similar social and intellectual background. In the early republic, patent success played a limited role in the development of new technologies. Instead, the stream of new inventions came flowing primarily from mechanics, the "inventive tinkers" who populated the towns and villages of the new nation and followed a trial and error approach to innovation.<sup>16</sup>

Agricultural society had a number of concerns. Like the rest of the population, farmers shared in the cultural nationalism of the post-

revolutionary era, a central component of which was the development of new technologies to ensure the nation's well-being. America's distinctive needs inspired Horatio Hinkle's "encouraged" technician "in invention and invention." In particular, America enjoyed abundant natural resources but a comparatively small population. The mismatch between natural wealth and labor supply sparked a continued search for technological solutions that would enable Americans to exploit the continent's bounty. American technicians addressed this dilemma directly by supplementing and replacing human labor with mechanical devices. Describing the threshing machine was only one of many such labor-saving tools. And like other propellers, Hinkle highlighted the concrete and useful benefits that his inventions would bestow upon the "community" and the nation.<sup>21</sup>

Above all, however, the technical apprenticeship system helped spark the creativity. An apprentice learned his trade by copying the work of a master craftsman and graduated to the standing of journeyman after he learned the "art and mystery" of the craft. However, the journeyman made the final step to master only after he moved beyond the original models to "produce his own masterpiece."<sup>22</sup> Thus, the system of technical training encouraged a "rivalry" among craftsmen, compelling them to constantly evaluate and surpass existing standards of achievement. To contemporary writers here was the key to individual and societal advancement. The spirit of "emulation," noted Adam Smith, made "excellency, even in mean

profession, an object of emulation' and 'brought . . . cotton to a very high degree of perfection.'<sup>10</sup>

Historians have generally viewed the South as bereft of a strong artisanal tradition that might inspire such emulation. Northern Virginia's shift from tobacco to grains, however, transformed the regional economy giving rise to a series of spin-off industries managed by a significant population of craftsmen who imitated the same system as their northern counterparts. After Denault became master of his own business, a mill dependent on the region's agricultural economy, he labored to increase the quality and value of the region's staples through his inventions. His efforts to make Quantico Creek navigable reflect a similar ambition. In short, the opportunities for invention and a spirit of emulation had turned the craftsman into a projector.<sup>11</sup>

Despite Denault's five patents, he remained an inventor of only regional significance. The same cannot be said of Berkeley County resident James Ramsey, who gained national fame for inventing an early version of the steamboat. Still, Ramsey had much in common with his contemporary John Denault; he grasped the scope of possibility in the new nation and the array of opportunities which independence opened to a person with his skills. Moreover, Ramsey's craft training sustained in him a spirit of emulation, a competitive streak which his contest with fellow inventor John Fitch only heightened. Born into a poor branch of a respectable Maryland

family in 1745 Ramsey operated as a blacksmith. However, he did not work long at that trade. After living in Baltimore for a time, Ramsey moved west to Higgans Creek, Maryland in 1750 where he established a milling operation with Michael Belinger. The next year he moved across the river to Bath in Berkeley County, constructed another mill, and in partnership with Richard Throckmorton built a boarding house to accommodate visitors to the springs at Bath. The following year, now in partnership with Nicholas Green, Ramsey added to his boarding house business a stage service running between Bath and Baltimore. In addition, Ramsey also worked as a building contractor, agreeing in September 1754 to erect in Bath a two story "dwelling House, Kitchen and Stable" for Washington.<sup>20</sup>

But Ramsey had his hand on another more important venture. He perceived that America's geographic expense presented a remarkable opportunity to the projector who could derive a means of facilitating water transport. Such an invention would accelerate western settlement and enable farmers to transport their produce economically to eastern markets. Seizing the chance, Ramsey used his 1754 meeting with Washington to demonstrate a model "pole boat" he had invented, designed to travel upstream using the current of the river as its motive power. In fact, by 1754 the pole boat was over a year old. In July 1753 Ramsey's partner, James McMerican, presented a petition to Congress on the inventor's behalf

sailing for "land on the west side of the Ohio" in return for "publishing his discovery." Though impressed by the need to "encourage every meritorious art," the committee refused to study the memorial because it felt that Congress deferred action. Early the next year, Rumsey and McIlhenny went before the Virginia Assembly seeking financial support, but they received only a promise that the state would grant "a sum adequate to the importance of the discovery" after "perfecting such a boat." Then in September Rumsey turned to Washington, hoping that the general's influence would garner him support.<sup>20</sup>

Washington was greatly impressed by Rumsey's demonstration. He composed a "certificate" which contained that Rumsey "has discovered the Art of propelling Boats by mechanics . . . against rapid currents" "An eye witness to an actual experiment," Washington had "no doubt" of the "great importance" of Rumsey's boat for the nation's inland navigation.<sup>21</sup> With Washington's support, Rumsey once more approached Congress and the state legislature. He received a readily deferred response: Congress decided to award Rumsey 30,000 acres of Ohio lands "provided" that by May 1, 1796 he produced "good and sufficient evidence" of the success of his boat. Similarly, in response to a new petition Rumsey prepared in November, the Virginia legislature granted him "sole and exclusive right" to operate his boats on "every stream, bay, inlet, or harbor" in Virginia for a term of ten years. Anyone who violated Rumsey's patent rights was subject to a fine of

\$500 for each infection. Rumsey's boat aroused genuine excitement. As Edward Brattleton pointed out, "if Mr. Rumsey's new constructed boats . . . should succeed," they would open up the western rivers and give rise to "a Spirit for Commerce". Rumsey's boat also received notice outside the state: in 1795 he acquired exclusive privileges for his boat in Maryland and Pennsylvania, and was approached by the South Carolina legislature.<sup>12</sup>

However, Rumsey never explicated on his infamous war privileges. By early 1796 his mind had turned to other matters. First, the Patuxent Company hired him to superintend the clearing of the Patuxent River; a position he would hold until July 1798. More important, his difficulties in turning his model pole boat into a working prototype led him to consider other forms of propulsion. As he explained to Washington in September 1796 the boat did not perform as expected in trials because it had a tendency to veer off course when one of the poles "got a good hold [sic] on One Side and not on the Other". Moreover, because the boat was powered by the flow of the river, it operated well only in currents moving at "Three miles per hour, or upwards". In lower currents, Rumsey concluded, "it will go But Slow". The solution, he decided as early as November 1796, was to find a new source of power. To that end, Rumsey resolved to "select [sic] another kind of Boat" constructed on new "principles [sic]". Specifically, he envisioned a steam-powered boat, though he remained light lipped about the details of his design for fear that other projects might stand it.<sup>13</sup>

He had good reason to worry. While Rumsey worked on his steam-powered boat John Fitch, a Connecticut-born mechanic and inventor residing in Philadelphia, journeyed to northern Virginia seeking patronage for his own steam-powered boat. In his autobiography, Fitch reported that he first conceived of the idea of applying steam propulsion to a boat in April 1780. Seeking financial aid, he presented his steamboat design to Congress in August but the committee who reviewed his petition "did not even deign to give a written Report to Congress."<sup>1</sup> He then approached the American Philosophical Society but received little encouragement. In October Fitch traveled south to Maryland and Virginia, meeting with Thomas Johnson, the governor of Maryland, and Washington. Johnson approved "much amused [and] with/ Fitch's plan, but Washington informed him that Rumsey had already conceived a steamboat comparable to Fitch's. Some months after Fitch left Mount Vernon without Washington's support, the general urged Rumsey to give his "plan to the public as soon as it can be prepared conveniently." "Many people on perusing your plan have come very near the mark," Washington reported, and "one" person, "who had something of a similar notion to offer to the public, wanted a certificate from me that it was different from yours."<sup>2</sup> The Virginia legislature, which Fitch petitioned in November, also expressed hesitance for financial aid.<sup>3</sup>

Over the next two years Rumsey continued to work on his steamboat. By late 1785, after having copper and tin parts cast in Baltimore and

Federicksburg, he had constructed a six-ton prototype and transported it down the Potomac to the nearby Falls. He and his partners, James Burns and Mellickson, continued to tinker with the machinery until the river froze in early January. Forced to pull the boat from the water, Rumsey decided to overhaul the engine. Over the winter he invented a new wear table boiler constructed of thin iron pipes bent to cross each other at right angles. Set directly in the furnace, this boiler promised to heat water to a higher temperature with less fuel. But until March 24, 1786, however, did Rumsey and his partners make the first trial with the boiler. Petrus Warden, who stood the boat between January and March, and witnessed the first trial later reported that the boat "moved against the current some distance though not much to satisfaction owing to the imperfection of the machinery." Burns remarked that the great heat generated by the boiler melted "some parts [of the machine] useless." Further repairs to the engine and boiler followed, but a trial in December 1786 failed when the heat of the steam melted "the soft saddle" with which the machine was constructed. A test the following September miscarried when the "badly made" boiler "opened at several of its joints."<sup>18</sup>

Not until late 1787 would Rumsey successfully subdue his boat. On December 8 he gathered Berkeley County's leading men, including Revolutionary War hero Horatio Gates, at Singletonsboro on the Potomac to witness his latest creation. The trial was a success. As Gates remarked,

the boat, with two tons on board, traveled "against the current at the rate of three miles per hour, by the force of steam." Eight days later, after some minor adjustments to the engine, the boat, carrying three tons, topped four miles per hour against the current. The descriptions of the "overhauling" the "imperfect" nature of the "machinery" were a remarkable success.<sup>4</sup>

Ramsey's achievement is even more astounding in light of his boat's inefficient design. In December 1782 Benjamin Franklin, expanding on the work of French scientist Daniel Bernoulli, presented a paper to the American Philosophical Society which claimed that the paddle wheel "wasted labor" by pushing water up and down as it moved in and out of the water. He also suggested an alternative: Use a pump powered by a "fire engine" to force water into a tube along the boat's hull and discharge it out the stern to propel the boat forward by reaction. Ramsey's design most closely followed this blueprint closely, though he later claimed to have arrived at his design independently of Franklin. Here, then, was the principle of reaction as action, an attempt to copy and better the model of America's leading scientist. Unfortunately, Franklin was wrong. The paddle wheel, as Fulton would later discover, wasted less of the limited energy generated by early steam engines than a water jet. For the time being, however, Franklin had spoken and his "verdict" seemed final.<sup>5</sup>

The success of December 1782 which convinced Ramsey to seek support beyond northern Virginia, his previous financial condition also

compelled him to seek new sources of patronage. In March 1758 he traveled to Philadelphia. The center of American science in the early republic, "Tomorrow morning," he wrote to Washington, "I throw myself upon the Wide World in pursuit [sic] of my plans, being no longer Able to proceed Upon my Own Foundation." In Philadelphia he hoped "to Convince a Franklin and a Baconhouse" of the utility of his designs "by actual Experiments." Soon after he arrived Rumsey presented "the Description of Several Machines [sic]" to the Philosophical Society. In addition to the water-tube boiler and steamboat, Rumsey presented plans for three other inventions. An improved saw mill which required "about one twentieth part of the water used for a common saw-mill," a siphon device water-pumping for "raising and conducting water" and an "improvement on Dr. Barker's Mill" which needed only "a third, or fourth part of the water now ordinarily required to turn a gristmill." The inventors—a Philadelphia paper reported, "go far to prove the worth of Mr. Rumsey's talents." They also reflected the opportunities available to an enterprising proprietor working in a grain-based agrarian economy. Like Benckise, Rumsey desired assistance "of important utility" to the "agriculturists and . . . manufacturers" found in northern Virginia.<sup>20</sup>

The Philosophical Society was greatly impressed with Rumsey's inventions. On May 1 numerous members, led by Franklin, formed the Rumseyan Society to "enable James Rumsey to carry into execution, on a

large and extensive plan, has shown both and sundry other machines." The society was organized as a joint-stock company, divided into 180 shares valued at £40 each. By its regulations Ramsey held one half the shares; the other fifty were purchased by subscribers for £20 down and a payment of £40 in a year's time. The society would aid Ramsey in obtaining patent rights for his inventions in exchange for a share of the profits. In short order, forty-three shares were sold and when the investors met May 15 1788 they decided that Ramsey should go to England to perfect his inventions. Ramsey recognized the significance of such an undertaking. The next day, hours before he boarded a ship to London, he wrote his brother-in-law Charles Morrow: "Thus is my Mercantile[] life Do not do anything [yet] now I am Done"<sup>22</sup>

Ramsey was at the peak of his success. The Patagonian Society though it failed to provide him with adequate financial support, put him in contact with some of Britain's leading inventors, including Matthew Boulton and James Watt.<sup>23</sup> In addition, the society worked hard to obtain patent rights for Ramsey's inventions in America. In 1788 they, along with Charles Morrow, petitioned the Virginia legislature asking that Ramsey receive the "Exclusive Privilege [yet] of making and Vending" his machines in the state "for a reasonable term of Years." The society also petitioned the legislatures of Pennsylvania, New York, New Jersey and Delaware on

Ramsey's behalf. And in 1790 after Congress passed the first national patent act, the society sought federal patents for Ramsey's invention.<sup>20</sup>

Unfortunately, the society's efforts encountered a serious obstacle. In the states and in Congress Ramsey's representatives were challenged by Frick, who contended that he had invented the steamboat prior to Ramsey. Indeed, in the three years since his journey to Virginia Frick had been busy. In April 1788 he formed his own company and went into partnership with mechanic Henry Voight. "the first dream," Frick proclaimed, "that ever I was acquainted with." Over the course of 1788 and 1789 Frick and Voight built a series of working models, and following Franklin's reputation of the public school, devised a system of "paddles to be worked by cranks" to propel their boat. By August 1789 Frick's crank and paddle boat worked well enough that he invited members of the Continental Convention "to take a sail with us." One witness to the trial, William S. Johnson, recounted that "the Exhibition gave \_\_\_\_\_ the Gentlemen present much satisfaction." Throughout the same period, Frick traveled to various state assemblies to obtain patent rights for his boat. By November 1791, when the Virginia legislature granted him a fourteen year patent for the "sole and exclusive right" to construct and use "every species" of steamboat in the state, Frick held similar patents from New Jersey, New York, Delaware, and Pennsylvania. He also tried (and failed) to obtain a land bounty from Congress similar to that which Ramsey had received in 1789.<sup>21</sup>

The broad nature of Fitch's state patents appeared to preclude Ramsey from ever receiving a patent for his discovery, despite its very different mode of preparation. In Virginia, for example, the committee assigned to examine the 1786 petitions of Morrow, the society, and Fitch recommended that the state award Ramsey a patent. The assembly, however, repudiated the committee and backed Fitch, accepting his contention that a Ramsey patent constituted a violation of the privileges they had granted him in 1783. In Pennsylvania the Ramsdynam Society petitioned the state assembly three times, in 1788, March 1789 and September 1789. Each time, Fitch argued in the press and before the assembly that any patent awarded Ramsey encroached upon his privileges, and each time the legislature backed him. Similar legal battles erupted in New York, New Jersey and Delaware.<sup>28</sup>

With the passage of the federal patent act in April 1790 a new arena of conflict opened. Fitch presented a petition to the patent commissioners in November 1790, but not until April 23, 1791 did Fitch and Ramsey's representatives appear before the patent board, chaired by Jefferson. Faced by the competing claims the board waffled. "They all appeared silent for some time," Fitch recounted "when Mr. Jefferson said that they could make no distinction in the Petition nor give our preference [proof of novelty]." Over Fitch's vehement objections, the commissioners "ordered Petitions to be issued to all." Thus, on August 10, 1791 both Ramsey and Fitch were

awarded federal patents for "propelling boats or vessels" by steam. In addition, the board granted Rumsey patents for his water-tube boiler and his improvement of Buckner's mill.<sup>37</sup>

Unfortunately, neither man profited from these patents. Deeply distressed by the "unsuccessful designs of our Nation," Fitch decided to abandon his steamboat scheme until "the Justice of our Country will protect our Landable inventions [sic]."<sup>38</sup> Though he traveled to Europe to seek support for his boat in 1793, Fitch's organized efforts were in vain. After returning to the United States in 1796, he moved west to Kentucky where he took his own life in 1798. Rumsey, meanwhile, remained in England for the next year and a half trying to get his steamboat project off the ground. Though he greatly impressed Jefferson, garnered praise from fellow inventors and scientists both in England and France, and registered four British patents, persistent financial problems—including the bankruptcy of his English partners—frustrated his efforts. Indeed, not until late 1798 had he secured his first, *The Columbian Mail*, for a demonstration. Tragically, just weeks before its trial, Rumsey died from a stroke. The following February his steamboat finally sailed, traveling at four knots an hour. It was the boat's only journey.<sup>39</sup>

Back home in northern Virginia, the local press lamented Rumsey's death. "We have lost a genius," one correspondent wrote, "the vigour and extent of whose intellect . . . has seldom been surpassed, and . . . very, very

which equalled.<sup>2</sup> Rumsey's steamboat, he declared, would "not become extinct, but survive its inventor." It would eventually prove of enormous "utility" to the nation, enabling an easy "navigation of our immense and rapid rivers." Of course, mastering the nation's waterways would have to wait until Fulton's *Clermont* creased up the Hudson River in 1807. Yet Rumsey undoubtedly influenced Fulton's final design: the two men had met in 1790 and had "gone on a excursion in the country" just days before Rumsey's death.<sup>3</sup>

At least one other northern Virginian inventor tried his hand at designing an effective propulsion system for boats. In 1808 Colonel Richard Clarke—descendant of a prominent Virginia family and quartermaster general for Virginia during the Revolutionary War—conducted a series of trials on the Potomac River using a "duck's foot or collapsing paddle" to propel a boat. Supported by the "liberality" of the "gentlemen of Alexandria" who opened a subscription on his behalf, Clarke believed that his paddle would eliminate the wasted labor associated with other forms of water propulsion. The common oar, for example, had to be "kept occasionally out of the water to avoid the repulsive stroke of the wave." In contrast, his collapsing paddle stayed in the water at all times, encountering little resistance as it returns stroke and moving any boat with a fraction of the labor necessary using the common oar. Clarke conducted his experiments using several boats, but he refused to compare

his gambles with steam. "The steam engine," he declared to Jefferson "is my son." What an engine could "be properly modified to serve the purpose" he hoped to create a "complete system" of propulsion.

Monroe granted Claiborne's invention with enthusiasm. The perfection of his machinery, pronounced one commentator, would facilitate "the inland navigation of our country" and produce the "greatest possible public utility."<sup>10</sup>

A government posting in 1884 cut short Claiborne's experiments, but his activities, and the support they received, reflected the interest of northern Virginia in technological innovation. The region's inhabitants were particularly fascinated by scientific inventions which promised to promote the economic development of the region and the nation. The shift to wheat played a crucial role in the growing concern for innovation and technological change. Farmers abandoned traditional methods of cultivation associated with tobacco, adopting many of the reforms suggested by agricultural writers. The resulting increase in production enabled the regional farmers to capitalize on burgeoning western markets, and all without abandoning slavery. Concurrently, a growing population of craftsmen, spurred by the transportation and growing requirements of groups, invented a variety of machines which promised to foster regional economic development and lower labor costs. These projects, motivated by their craft training and the opportunities offered by a young, expanding and

underpopulated nation, placed the region at the forefront of the 'technological euphoria' of the early republic.<sup>30</sup> In short, northern Virginians embraced technological innovation and invention, making it an essential facet of the 'pursuing spirit.'

### Notes

1 'Constitution of the Alexandria Society for the Promotion of Useful Knowledge' *Westminster and Alexandria, VA, Samuel Hanson, 1789*; *Isaiah Lee, An Oration, Delivered October 8, 1790, before the Alexandria Society for the Promotion of Useful Knowledge* (Alexandria: Hanson and Reed, 1790); J. R. Kirkman Givens and Alexandria Advertiser, November 18, 1789 and May 18, 1791, Brooke Hindle, *The Pursuit of Science in Revolutionary America, 1763-1820* (Chapel Hill: University of North Carolina Press, 1964), 275.

2 Carol Fawcett, *The Machine in America: A Social History of Technology* (Baltimore: Johns Hopkins University Press, 1983), 35-37, 48, 63, 67. Other historians of early American technology have described the same enthusiasm and nationalist interest in technological and agricultural innovation; see, for example, Brooke Hindle, *Science in Revolutionary America* (Chapel Hill: University of North Carolina Press, 1957), 248-278, 380-388 (who labels the phenomenon 'cultural nationalism'); Neil Langley York, *Mechanical Menemorphosis: Technological Change in Revolutionary America* (Westwood, CT: Greenwood Press, 1986), 3-7, 155-164; Alexander Orin, 'Introduction: To Build a New Intellectual Order,' in *The Pursuit of Knowledge in the Early American Republic: American Scientific and Learned Societies from Colonial Times to the Civil War*, Alexander Orin and Stephen C. Brown eds. (Baltimore: Johns Hopkins University Press, 1976), 20; and John C. Greene, *American Science in the Age of Jefferson* (Nashv.: Iowa State University Press, 1964), 136, 404-425.

3 Driven by a 'self-perception of urgency' historians of technology have long naturally—perhaps overly-enthusiastic with evaluating the 'state of the field' and establishing its 'intellectual boundaries'; see John H. Eisenstaedt, 'Congress: Recent Trends in the History of Technology,' *American Historical Review* 90 (June 1984): 718. Thus they have been extremely explicit in their calls for a 'revolution' here. For a sampling of a much larger literature, see Stephen B. Grubb and Robert C. Post eds., *In Context: History and the History of Technology: Essays in Honor of Melvin*

Emmaberg (Pittsburgh, PA: Lehigh University Press, 1998), Essays 8. Ferguson, "Toward a Discipline of the History of Technology," *Technology and Culture* 25 (January 1974): 13-30; and Thomas J. Misa, "How Machines Make History, and How Historians (and Others) Help Them to Do So," *Science, Technology, and Human Values* 13 (Winter and Spring 1994): 365-388. For a good recent example of the "contextual" approach in practice see, Judith O. McGraw ed., *Early American Technology, Making and Doing Things from the Colonial Era to 1860* (Chapel Hill: University of North Carolina Press, 1994).

4. For two exceptions see: Mervin Lee Rumber, *Slavery, Free Society, and the New Technology: The Challenge of Change* (Gaines: Capra's University Press, 1977); and Jeyar Chaplin, *An American Farm: Agricultural Innovation and Modernity in the Lower South, 1790-1815* (Chapel Hill: University of North Carolina Press, 1993). Rumber emphasizes that the local slave population played "a very marginal role" at Harpers Ferry 1805. Chaplin emphasizes that though whites were highly "tolerant" to their existence of modernity, the adoption of new technologies still experienced significant resistance within the slave society of the lower South (14-158). Moreover, she argues that the existence of technological innovation was restricted to the planter class (128-130).

5. This portrait of the South is drawn from numerous sources, but see especially Barbara Ryan Brown, *Southern Home: Slaves and Slaveholders in the Old South* (New York: Oxford University Press, 1982), 62-81, 170-198, 317-336; David Bervellson, *The Long South* (New York: Oxford University Press, 1967); Eugene Genovese, *Roll, Jordan, Roll: The World the Slaves Made* (New York: Vintage Books, 1976; originally published, 1973), 355-364; idem, *The Political Economy of Slavery: Studies in the Economy and Society of the Old South*, Second Edition (Storrfon, CT: Wadsworth University Press, 1989; originally published, 1965), 47-65, 85-108, 124-163; Elizabeth Fox-Genovese and Eugene Genovese, *Frailty of Merchant Capitalism: Slavery and Domestic Property in the Slave and Expansion of Capitalism* (New York: Oxford University Press, 1963), 60-135, 240-264; Kenneth M. Stampp, *The Peculiar Institution: Slavery in the Ante-Bellum South* (New York: Vintage Books, 1964; originally published, 1956), 27-100, 118-120; David W. Mervin, *Flight and Rebellion: Slave Resistance in Eighteenth-Century Virginia* (New York: Oxford University Press, 1973), 23-60; Carl Hirschebaugh, *The Colonial Craftsmen* (New York: New York University Press, 1983), 1-32, 128-129, 161-163; and Richard D. Brown, *Modernism: The Transformation of American Life, 1800-1860* (New York: Hill and Wang, 1979), 82-87, 122-126.

4 Robert H. Koenig and H.B. Goodrich, *Dreams of American Southsiders: A Study Made Under the Direction of a Committee of the Faculty of Wesleyan University* (Chicago: University of Chicago Press, 1956) 284-286 (quote 285). For similar conclusions see Joseph Green, 'The Growth of Learned Societies in the Southeastern United States to 1860', *Journal of Knowledge*, 208-218; Dirk J. Struik, *Slavery, Science, and the Making of Science* (Little Brown and Company, 1981) 139-140, 150-151 and Green, *Science in the Age of Jefferson*, 107-116. There are contrary views. For example, David John Davis, *Slavery and Human Progress* (New York: Oxford University Press, 1989) 21-22, 289-329-337 notes that 'the effect of slave labor on economic and technological innovation was still a matter of controversy'. Taking a global and trans-historical view, he adds: 'There is no clear evidence that slavery prevented technological innovation in human mining and agriculture . . . or that it contributed to the decline and fall of the empire. The institutions did not stifle science, learning, or urbanization among the Arabs nor did it disappear from the most prosperous and culturally advanced portions of the medieval Europe.' Likewise, in Cuba in the 1840s, 'slave labor seemed to be fully compatible with the most sophisticated technology'. Similarly, Lewis Coal Gray, *History of Agriculture in the Southern United States to 1860* (2 Volumes) (Cambridge, MA: Pease Press, 1988 originally published 1892) 1:406-471, 2:732-818 argues that there was a significant degree of agricultural improvement in the South, and that the material problems of Southern agriculture were 'attributable usually to a sparse labor supply as proportion to land resources and to the superiority of the South for the production of certain gross staples'. The innovation made by a Southerner that his ingenious system of agriculture could be carried on by slaves 'was simply displaced in various seasons and periods 1852. Northern Virginia after the Revolution was one of these regions and periods

7 Virginia Gazette and Alexandria Advertiser, November 20, 1792 and May 29, 1794, 'Constitution of the Society'. In his diary Mann described his frequent attendance at the social functions of prominent Alexandrians: an indication of his high social status, see Remond James Mann, *Alexander Mann, 1786-1835* (Library of Virginia, Richmond Virginia (January 1977); see also T. Michael Miller, *Artisans and Merchants of Alexandria, Virginia, 1780-1840* (2 Volumes) (Bowie, MD: Heritage Books Inc., 1990-1992), 1: 580. On Science see: Gerts Baron, *Papers: Early Chapters in the Development of the Potomac Basin to the East* (Washington: Columbia Historical Society, 1912) 180-185, see Mann, see Miller, *Artisans and Merchants*, 1: 30, 2: 45-52, 218, see Harrison, see Aug., 3: 180; see Washington see: *Public Characters, or, Contemporaries Eminent: Containing Memoirs of the Following Personages . . .* (New York: G & B. White, 1806) 19-20; see also Miller, 'Charles Lee, Collector of

Customs. Portrait of an Early Alexandria on the Waterfront." *The Alexandria Waterfront Project*. Both and Belknap, 1730-1780 (Alexandria VA: Alexandria Urban Archaeology Program, 1989; 10/88 on BPWhar see *Virginia Journal and Alexandria Advertiser*, February 24, 1784 and May 18, 26, and June 2, 1785. The attending members of the society included: William Baker (Alexandria physician); William Brown (Alexandria physician); Overton Carr (unknown); Richard Conroy (Alexandria merchant/merchant); James Cook (Alexandria physician); William Cook (Alexandria attorney); Thomas Douglas (unknown); David Farley (Alexandria merchant); John Fitzgerald (Alexandria merchant); John Gill (Alexandria merchant); George Gyles (Alexandria merchant); Samuel Goodrich (Alexandria school teacher); Richard Harrison (Alexandria merchant); Gilbert Harvey (Alexandria school teacher); William Herbert (Alexandria merchant/banker); William Hodgson (Alexandria merchant); R.T. Hoce (Alexandria merchant); William Hunter (Alexandria merchant); Nathaniel Ingraham (Alexandria merchant); Leavelle Lee (Puritas Co. planter); Richard Blund Lee (Puritas Co. planter); Charles Little (Puritas Co. sheriff); John Love (Alexandria attorney); William Lowry (Alexandria merchant); William Lytle (Alexandria merchant); John M. Crenshaw (Alexandria merchant); Cyrus Moore (Alexandria attorney/patrol); John Murry (Alexandria merchant); Thomas Foster (Alexandria merchant); Jonathan Potts (Alexandria merchant); Leven Powell (Lexington Co. planter); Roger Prevost (unknown); David Stewart (Georgetown merchant); Thomas Swan (Alexandria merchant/attorney); Jesse Taylor (Alexandria merchant); Roger West (Puritas Co. planter); and Oliver Winzer (Alexandria merchant). See: Miller, *Antiquities and Monuments*, 1: 7-14, 21, 58, 75, 84-87, 108-140, 161-162, 186-193, 204-205, 218-223, 225, 270-279, 347, 348, 393, 398, 342-343, 382, 2: 23, 41-42, 47, 53, 304, 374-375, 342-343, 382. On the membership of learned societies in the North see: Olson, "Introduction," *Forum of Knowledge*, xxi-xii; James M. McKean, "Shaping a Provincial Learned Society: The Early History of the Albany Institute," *ibid.*, 314-342; Walter Shaw Whitehall, "Early Learned Societies in Boston and 'Country,'" *ibid.*, 158-162; and Susan Harris, "Philadelphia Patronage: The Institutional Structures of Natural History in the New Republic, 1800-1810," *Journal of the Early Republic* 4 (Summer 1984): 211-152.

8 Lee, *An Oration*, 1: 7. On the uniform constitution of early American societies see: Greene, *American Science*, 9-12, 29-33, 35, 414-418; *Profile*, Sources in Revolutionary America, 252-279.

9 *Virginia Gazette and Alexandria Advertiser*, February 18, 1781. Along with the Alexandria society, Goodrich himself seems to have disappeared. I have found no trace of him in Alexandria after 1784. On the slave population of northern Virginia see Chapter 1.

10 *Alexandria Advertiser*, August 16, 1781, January 13 and February 21, 1785, December 16, 1797 and December 16, 1799. *Alexandria City Legislative Petitions, 1778-1808*, LCV. See also Shephard, ed., *The Statutes at Large of Virginia, from.....1792 to.....1808*, 3 Volumes (New York: AMS Press, Inc. 1979) originally published Richmond, 1808: II: 153, 171, 172. *Alexandria Advertiser and Commercial Intelligencer*, February 9, 1799, February 16, 1801, and February 16, 1802.

11 *Alexandria Register*, March 27 (Washington County) and September 26, 1802 (several of learned society); *Alexandria Advertiser and Commercial Intelligencer*, July 7, 1802 (Delaware County) and April 7, 1803 (Culpeper County). On Peck's mission see Greene, *American Science, 1810-18*, and Basile, *Science in Revolutionary America, 1760-1820*.

12 *Alexandria Advertiser*, Yvonne Gaultin and Alexandria Advertiser, January 7 and December 2, 1780 (quoting) October 16, 1776, *Alexandria Legislative Petitions*, LCV. William Walter Henry, ed., *The Statutes at Large, Being a Collection of all the Laws of Virginia, from the.....Year 1619*, 13 Volumes (Baltimore, New York, and Philadelphia: 1809, 1820), 12: 202-203. Manassas school: *Estimate, Charles W. & Berkeley Advertiser*, June 4, 1756 (quoting) *Charlottesville Academy*, December 12, 1757 (quoting), December 5, 1758 and December 4, 1759, *Berkeley County Legislative Petitions, 1778-1808*, LCV. Shephard, *Statutes at Large*, 3: 115, 203-204, and Ben Laws for the Commission and Government of the *Charlottesville Academy, in Berkeley County*, Virginia, adopted by the Board of Trustees, 3d, February, 1756 (*Alexandria*, Henry Gist 1754). In addition, private academies were incorporated in Winchester in 1756, October 25, 1754 and November 14, 1756, *Winchester Town Legislative Petitions, 1765-1805*, LCV. Henry, *Statutes at Large*, 12: 265, 16: 64-66, in Landburg in 1750 (December 1, 1746), *Landburg County Legislative Petitions, 1778-1808*, LCV. Shephard, *Statutes at Large*, 3: 214-215, 256. (*Landburg*) *True American*, December 20, 1802, and in Charlottesville in 1808 (Shephard, *Statutes at Large*, 3: 202-203). A school was also established in Shephardstown in 1758 *Estimate, Charles W. & Berkeley Advertiser*, March 21, 1754). John Davis, known to tutor Andrew Elmore's children at Orange Mills just north of Alexandria, was motivated by Elmore to teach only "reading, writing, and arithmetic." As in Latin, or French, he considered the study of other languages an abuse of time, and very rarely deigned me not to say another word about it." John Davis, *Travels of Four Years and a Half in the United States of America, During 1786, 1788, 1800, 1801, and 1802*, A. J. Morrisson, ed. (New York: Henry Holt and Company, 1904) originally published London, 1802: 252.

13 For statements of editorial intent the best sources are the stated aims of a newspaper. For example, in 1794 George Edmonds, the printer of Alexandria's first newspaper the *Yankee Journal and Alexandria Advertiser*, stated (February 3, 1794): "Our Ambition will be to make our JOURNAL, a Vehicle of Amusement and Instruction selected from the most Moral, Conscientious, from North to South and from East to West . . . Any Science or Progress that may increase the COMFORTS of the Town, and consequently the Interest of its Inhabitants, with Improvements in ARTS, AGRICULTURE, or MANUFACTURES . . . will be gratefully received, and presented to the Public." Eighteen years later, James D. Watson emphasized similar goals for his new paper, the *Columbian, Merchant, and Commercial, Mechanics, and Agricultural Gazette*: "In a country like this . . . the Agricultural Interest must be viewed . . . as an object of the greatest importance . . . [I] will, therefore . . . embrace every opportunity of publishing whatever may have a tendency to instruct or improve the theory or practice of Farming, or to benefit the cultivators of the Soil. In the selection of news, attention will be paid to articles of Commercial importance . . . with due view the *Columbian Advertiser* will contain every possible information relative to the state of foreign markets."

The professions of the *Mechanics Gazette* . . . will be steadily attended to by the publication of notices or discoveries calculated to improve the quality of articles, or diminish the quantity of labor. The friends of Science, the Editor hopes, will have no reason to complain of omission or neglect." *Town and Country of Columbia Daily Advertiser*, July 29, 1811.

14 (Katharine) *Yankee Contract*, May 1, 1794; *Yankee Gazette and Alexandria Advertiser*, July 22, 1796. Wilhelm Herschel, a German who moved to England, discovered the planet Uranus with his new reflecting telescope; see, Edward T. Martin, *Thomas Jefferson: Scientist* (New York: Henry Schuman, 1932) 85. Hinkle reports that Herschel forwarded copies of his papers to the American Philosophical Society: *Scientist*, in *Reinholdson's Almanac*, 179.

15 Nail making machine: *Town and Country of Columbia Daily Advertiser*, March 26, 1802 (Michael Garbin, Denton, Virginia; Federal patent awarded February 20, 1804); and (Feb. June 9, 1802 (Edward West, Lexington, Kentucky; Federal patent awarded July 6, 1802). Saw mill: (Feb. April 6, 1802 (Robert McKee, New York; Federal patent awarded March 24, 1798). Turning press: *Columbian Merchant and Alexandria Gazette*, December 24, 1796 (Joseph Keady, Norfolk, Connecticut; Federal patent awarded November 16, 1796); and *Town and Country of Columbia Daily Advertiser*, September 6, 1804 (George Clymer, Philadelphia). Paper making: (Feb. February 1, 1800 (Joseph Condit, Hensselt, Connecticut; Federal patent awarded December 28, 1801). Clock making: (Feb. May 26,

1802 (Jacob Alrich, Wilmington, Delaware); *Tanning*, *ibid.* October 6, 1801 (Hersbach Laid Under, New Hampshire; federal patent awarded July 27, 1804) (*ib.* April 18, 1803 (for Joseph Baskin Great Britain) and *Alexandria Gazette*, May 17, 1800 (Hersbach Penna.); *Seawing*, *ibid.*, August 27, 1800 (inventor unknown). Federal patents: "East of Paterson, 1790-1804," *American Slave Papers, Documents, Laws, and Statistics of the Congress of the United States*, Class 13, Microfilm, 1790-1804, 2 Volumes (Washington: D.C.: Gale and Son, 1814), 1: 423-424.

16 *Alexandria Advertiser*, October 28, 1787, and *Columbian Mirror and Alexandria Gazette*, November 2, 1787.

17 Ship pumps: *Virginia Journal and Alexandria Advertiser*, April 13 and June 28, 1780 (Peter Herkin, North Carolina); *Columbian Mirror and Alexandria Gazette*, July 18, 1780 (Thomas Wylkoup, Philadelphia; federal patent awarded June 28, 1780); *Town and District of Columbia Daily Advertiser*, December 6, 1780 (John Barclay, Boston; federal patent awarded November 28, 1780), *ibid.*, August 22, 1800 (George Clymer, Philadelphia; federal patent awarded December 22, 1800) (*ib.*, November 18, 1801 (Jacob Perkins, Boston; federal patent awarded July 9, 1802); Ship ventilators: *Columbian Mirror and Alexandria Gazette*, June 21, 1780, and *Town and District of Columbia Daily Advertiser*, May 28, 1800 (Thomas Wylkoup, Philadelphia; federal patent awarded June 28, 1780), *ibid.*, September 27, 1804, June 8 and July 17, 1805, and *Alexandria Advertiser and Commercial Intelligence*, September 12 and November 2, 1801 (Richard Baskham, New York; federal patent awarded October 18, 1801) (Federal patents: *American Slave Papers, Microfilm*, 1: 425-426). On the possible nature of others in hot climates see: Carolyn Karch and Ronald Hoffman, "Single Orgas and Urban Development in the Eighteenth Century South," *Entrepreneur in American History* 19 (1970): 30.

18 *Alexandria Gazette*, December 21, 1800 (John Goodson, Washington; federal patent awarded December 3, 1800); *Alexandria Advertiser and Commercial Intelligence*, September 8, 1802, and *Columbian Advertiser and Commercial, Mechanical, and Agricultural Gazette*, September 23, 1800 (Michael Sauer, Alexandria; federal patent awarded August 29, 1800). Federal patents: *American Slave Papers, Microfilm*, 1: 423-424. In the 1806 census twenty-six individuals can be identified as ship builders and another twenty-nine are listed as saw operators see Miller, *Artisans and Merchants*, 2: 385-390.

19 Cotton processing: [Washington, *Virginia Gazette*], April 25, 1784 (Delaware); model of English power loom; *ibid.*, March 4, 1785 ("Rev. Campbell," York, Pennsylvania; model of English Arkwright's water frame); *Alexandria Advertiser*, October 3, 1787 ("Mr. Holt," St. Domingo; water

and *Alexandria Exporter*, June 26, 1866 (Charles F. Schwenck, Fayetteville, North Carolina, cotton gin. Patent issued January 4, 1869). Federal patent: *American State Papers, Miscellaneous*, 1: 400-401.

20 Harry J. Carraway, ed., *American Embroidery* (Port Washington, NY: Kennikat Press, 1964), 189-190 (though the author (probably Arthur Trench) notes that Virginians followed the "bad ideas of their brethren to the southwards" where "worse ploughing is to be seen" (189, 190). Harold B. Gail, "Wheat Culture in Colonial Virginia," *Agricultural History* 32 (July 1978): 363-364. See also, Charles H. Deshotel, "The Tools and Implements of Agriculture," *ibid.* 46 (January 1972): 87-88; and Grey, *Agriculture in Southern U.S.*, 1: 169-170, 194-196, 2: 760.

21 Martin Jefferson, 48, 104-105; Grey, *Agriculture in Southern U.S.*, 2: 764, *Tools, and District of Columbia Daily Advertiser*, December 31, 1779 (quote), April 5, 1800 (*Columbian Mirror* and *Alexandria Gazette*); January 2, 1800 (*American State Papers, Miscellaneous*, 1: 400). See also *Winchester, Virginia Chronicle*, June 14, 1788; and *Alexandria Advertiser and District of Columbia Daily Advertiser*, July 14, 1788.

22 Deshotel, "Tools and Implements," 85-87 (quote); Gail, "Wheat Culture," 363, 369-370; Grey, *Agriculture in Southern U.S.*, 1: 170, 2: 765-766, 768. Avery Craven, *Seed Education as a Factor in the Agricultural History of Virginia and Maryland, 1600-1800* (Chambers: University of Illinois Press, 1909), 174-187; *Tools, and District of Columbia Daily Advertiser*, May 3, 1786 (quote). The report does not name the inventor, but it was Elihu Shotton Spooner, who patented a "machine for planting corn, &c." on January 26, 1779; see, *American State Papers, Miscellaneous*, 1: 400.

23 *Winchester, Virginia Chronicle*, July 26, 1786; *Virginia Gazette and Alexandria Advertiser*, August 1, 1786; *Alexandria Daily Advertiser*, June 26, 1804. A resident of Pennsylvania, Craven received a federal patent on April 30, 1804 (*American State Papers, Miscellaneous*, 1: 400). These early machines were of limited effectiveness, which helps to explain why they did not cause common usage. In contrast to Harkness's 1200 strips, the peeping machines devised by Obed Hussey in 1833 and Cyrus McCormick in 1834 cut from three to twenty acres per day; see, Grey, *Agriculture in Southern U.S.*, 2: 766-769.

24 Gail, "Wheat Culture," 364-365; Deshotel, "Tools and Implements," 84. For contemporary descriptions of fluting and crusting grass see: John Frederick Deshotel Swarth, *A Tour of the United States of America*, 3 Volumes (New York: New York Times and Arno Press, 1968; originally published London, 1784), 1: 114-115; George Washington to Arthur Willing, November 4, 1789, John Fiske, ed., *The Writings of George*

Washington, 1785-1789, 56 Volumes, Washington, Government Printing Office, 1855-1860, 56, 204-205, and William Bondhead, *Observations on the Appliances of the United States of America* (London: W. Fisher & Co., 1801), 47-48.

39 *Shenandoah Virginia Gazette*, May 14, 1788 (Bordley), and June 10, 1788 (Pollard); *York Mechanical Magazine*, 158-160, and *Gray, Agriculturalist in Southern U.S.*, 2, 403-413. Washington was extremely impressed with Pollard's threshing machine. In January 1790 he returned to the Barton farm for a second demonstration and calculated that "two boys" could process sixteen bushels a day using the machine. "The grain," he concluded, "passes through without bruising and is well separated from the chaff" . . . Upon the whole it appears to be an easier, more expeditious, and much cleaner way of getting out grain than the usual mode of threshing; and worthy to be preferred to treading". John C. Filapovich, ed., *The Diary of George Washington, 1788-1789*, 4 Volumes (Boston: Houghton Mifflin Company, 1864), 4: 78-79 (January 22, 1790).

40 *Shenandoah Virginia Gazette*, July 28, 1788 (Lawson); *Hartshorn's Columbian Mirror* and *Alexandria Gazette*, November 1, 1788 and *Alexandria Advertiser and District of Columbia Daily Advertiser*, November 8, 1788 (William Butler patent awarded March 18, 1793); *Alexandria Advertiser and Commercial Intelligence*, February 2, 1801, *Town and Country of Columbia Daily Advertiser*, February 3, 1801, and *Alexandria Express*, August 26, 1803 (Christopher Howe patent awarded August 20, 1804) (pub. August 4, 1804, and *Alexandria Daily Advertiser*, August 2, 1804 (Solomon Brown and Isaac Cox, no patent). For federal patents see, *American State Papers, Miscellaneous*, 5, 403-404. Washington resisted Butler in 1797 after having a "good report" of his threshing machine. By October Butler had secured a thresher at Mount Vernon, see, Washington to Butler, June 26 and July 1, 1797, and Washington to Thomas C. Morris October 3, 1797, *Writings of Washington*, 35, 407-418, 408, 36, 57-59. Northern Virginia's cultivation of corn for export also inspired interest in the new threshing machine promoted by Paul Poiry of Massachusetts on October 20, 1800. In early 1804 Alexandria merchant Robert Hartshorn obtained a license to sell the machine in the District of Columbia and Virginia, see, *Alexandria Daily Advertiser*, February 27, 1804.

41 *Virginia Gazette and Alexandria Advertiser*, November 13, 1780 (report on Evans, n.d.); *Columbian Mirror and Alexandria Gazette*, August 21, 1794 and May 28, 1795 (subscriptions for and sale of Evans book); and *Columbian Advertiser*, and *Commercial, Mechanical, and Agricultural Gazette*, September 2, 1803 (final quote). The description of Evans's mill follows Peter B. Mathias in *American*, 27-29 (quote), York, *Mechanical*.

*Metamorphoses*, 187-204, 211-228 and Darwin H. Stapleton, *The Transfer of Early Industrial Technologies to America* (Philadelphia: American Philosophical Society, 1987), 9-12-13. Essay reviewed a Federal patent December 28, 1790, *American State Papers*, Miscellaneous, 1: 485. For descriptions of the mills in northern Virginia which followed Koenig's design see: Ross B. Matheson, *Colonial Mill Run* (Furber, VA: Furber County Office of Comprehensive Planning, 1978), 1-8 and passim; Nan Robertson, *Donald Swain, Junior* (Arlington, Fairfax County, VA: History of Fairfax VA, Fairfax County Board of Supervisors, 1978), 177-184; Furber Historical Landmarks of Old Prince William, *Study of Origins in Northern Virginia*, 2 Volumes (Richmond: Old Dominion Press, 1959), 2: 428-432; Keith Sprague Colchester, *Colonial Port on the Potomac* (Furber, VA: Fairfax County Office of Comprehensive Planning, 1978), 104-106; Lawrence M. Mitchell "Old Mills in the Centerville Area," *Historical Society of Fairfax County, Virginia, Inc. Yearbook* 6 (1934-1935): 22-23; Charles W. Stearns, *Washington and the Revolution* (Richmond, Garrett & Massie, 1956), 94-97, 147-148, 217-218.

35 Madison, quoted in [Winchester] *Virginia Gazette*, April 20, 1788 and July 9, 1788; Trench Cook, *A View of the United States of America...* (Philadelphia: William Hall and Wright Barreman, 1784), 8. See also: R.A.J. Johnson, *The Foundations of American Economic Freedom: Government and Enterprise in the Age of Washington* (Bloomington: University of Missouri Press, 1972), 72-88.

36 *Times and District of Columbia Daily Advertiser*, August 24, 1790; February 5 (Turkey wheel) and June 25, 1800 (jackey wheel); *Virginia Journal and Alexandria Advertiser*, February 20, 1788 (sawmills); also *Alexandria Advertiser and Commercial Intelligence*, October 14, 1800, for Swiss methods of measuring. On the transfer of technology from Europe to America in the early republic see: Stapleton, *Transfer of Early Industrial Technologies*, 1-21; Carroll W. Pursell, "Thomas Digges and William Brown: An Example of the Transfer of Technology," *William and Mary Quarterly*, 3rd Ser., 31 (October 1974), 557-562 and also: "Comments on Science and Technology in Agriculture," *Agricultural History* 48 (January 1973), 55-59.

37 [Winchester] *Virginia Gazette*, January 14, 1780, *Times and District of Columbia Daily Advertiser*, July 22, 1790.

38 *Alexandria Advertiser and Commercial Intelligence*, April 9 and November 10, 1800; *Alexandria Daily Advertiser*, April 18, 1804.

33 *The Pennsylvania, Delaware, Maryland and Virginia Almanacs and Ephemeris for the Year of Our Lord, 1781*.... (Baltimore: William Goddard and James Knapp, sold by Hanson and Bond, Alexandria, [1780], 98-99; David D. Hall, *Writings of Thomas Paine, Baron of the Commons*, Popular Religious Beliefs in Early New England (New York: Alfred A. Knopf, 1969), 58 (quote); Allen Redford Tolson and Steven, *The Development of Southern Culture in the Chesapeake, 1680-1820* (Chapel Hill: University of North Carolina Press, 1966), 109 (quote); Chester R. Keweenaw, "The Farmer in the Eighteenth Century Almanac," *Agricultural History* 39 (July 1964): 107-112 (quote). For other almanacs printed or sold in the region which included "practical advice for farmers" see: *The Pennsylvania, Delaware, Maryland, and Virginia Almanac and Ephemeris for the Year of Our Lord, 1783*.... (Baltimore: M. K. Goddard, sold by George Richards and Company, Alexandria, [1782]; no pagination; *The Virginia Almanac, or Winchester Ephemeris for 1783* (Winchester, VA: Richard Gower, 1782) as reported in the *[Winchester] Virginia Gazette*, December 30, 1782; and *The Potomac Almanac, or the Washington Ephemeris, for the Year of our Lord 1783*.... (Georgetown: James Doyle, 1783) no pagination.

34 *Virginia Gazette and Alexandria Advertiser*, November 11, 1782 (Keweenaw); *Alexandria Advertiser and Commercial Intelligencer*, June 8 and July 3, 1804, and Times and Dispatch of Columbia Daily Advertiser, July 30, 1803 (Anderson). For the arguments see Lord Elmsley, Henry Home, *The Gentleman Farmer: Being an Attempt to Improve Agriculture by Selecting it to the Test of Rational Principles* (Edinburgh: W. Creech, 1784); James Anderson, *Essays Relating to Agriculture and Rural Affairs*.... (Edinburgh: W. Creech, [1782]; "On Great Britain as the source—though often a willing ear—for agricultural improvement see, *Woolley, Slavery in Revolutionary America*, 254-264, 302-303, and Rodney C. Leslie, "The Influence of English Agriculture on American Agriculture," *Agricultural History* 17 (January 1943): 3-15.

35 *[Winchester] Virginia Gazette*, December 30, 1782; *Columbia Times and Alexandria Gazette*, May 25, 1797; *Alexandria Expresser*, July 1, 1805; July 18 and 25, 1804; *Alexandria Daily Advertiser*, February 2, 1804, and January 24, 1806; *Columbia Advertiser and Commercial, Mechanical, and Agricultural Gazette*, October 1, 4, 6, 11, 14, and 18, 1802, and *Letters from the Gardening Group: Washington to Arthur Young and the John Suckling Containing an Account of his Visit to the* (Alexandria: Cotton and Stewart, 1803). On Young's influence more generally see, Rodney C. Leslie, "Arthur Young and American Agriculture," *Agricultural History*, 40 (January 1966): 40-54 (quote 41-42), and Carl R. Woodworth, "A Discussion of Arthur Young and American Agriculture," *ibid.*, 42 (January 1966): 57-67.

55 Jefferson to George M. Jefferson, March 3, 1817, and Jefferson to George Logan, July 1, 1818, Thomas Jefferson Papers, Library of Congress (hereafter LCTJ, Letters from Washington to Young, 24, 79-80). On the labor shortage and consequent high cost of labor (\$1 per day paid to imported in American men, Times, and District of Columbia Daily Advertiser, July 21, 1800. Federal Agricultural Knowledge on Master of Farm, Also Farm, Churches and Conventions on the Subject, What Applied to Slaves (Philadelphia): Charles Cist and John Mackintosh, 1797). See also, Locke, "Young and American Agriculture," 45; Woodward, "Young and American Agriculture," 81-83; and Charles D. Lowrey, "James Barlow: a Progressive Farmer of Antebellum Virginia," *American Historical Association, Essays in Honor of Bernard Mann John B. Hols*, ed. Charlottesville: University Press of Virginia, 1974, 165-181.

56 Virginia Journal and Alexandria Advertiser, March 25, 1786 (P.D.), Times, and District of Columbia Daily Advertiser, May 22, 1781 (P.D.). For reports on working new crops see [Blanchester] Virginia Chronicle, June 10 and September 3, 1778 (wheat); *Virginia Gazette* and *Alexandria Advertiser*, December 9, 1780 (potatoes); *Columbian Magazine* and *Alexandria Gazette*, May 20, 1780 (potatoes and Indian peas); Times, and District of Columbia Daily Advertiser, August 24, 1788 (wheat); April 14, 1800 (wheat and corn); March 17 (potatoes) and May 21, 1800 (wheat); *Alexandria Advertiser* and *Commercial Intelligencer*, March 28, 1800 (wheat, potatoes, etc.); and *Alexandria Reporter*, July 1, 1800 (wheat and corn). For reports on how to increase household production, see [Blanchester] *Virginia Chronicle*, September 2, 1780 (cows); Times, and District of Columbia Daily Advertiser, March 17 (peach trees) and October 7, 1781 (apple trees); June 22, 1800 (apple and peach trees); *Alexandria Reporter*, May 17, 1800 (peach trees); *Alexandria Daily Advertiser*, July 2, 1800 (peach trees).

57 Sheep on worn-out land. [Blanchester] *Virginia Chronicle*, June 20, 1780 (sheep); Times, and District of Columbia Daily Advertiser, June 17 and July 8, 1800 (sheep); *Virginia Gazette* and *Alexandria Advertiser*, December 23, 1780; see also [Blanchester] *Virginia Chronicle*, October 22, 1784. Cattle: *Columbian Advertiser* and *Commercial, Mechanical, and Agricultural Gazette*, August 8, 1782 (cattle); see also *Alexandria Daily Advertiser*, May 18, 1800. Poultry: *Virginia Gazette* and *Alexandria Advertiser*, April 23, 1780. Turkeys: *Alexandria Reporter*, July 1, 1800. Sales and raising of manure: *Alexandria Daily Advertiser*, July 2 and 24, 1800 (manure); *Gazette*; *Alexandria Advertiser* and *Commercial Intelligencer*, May 4 and November 22, 1800 (manure); and May 26, 1800, *Alexandria Daily Advertiser*, July 20, 1800; and *Alexandria Reporter*, October 17, 1800. Soil chemistry: *ibid.*, March 6, 1800. On American "artificiality" for planters of pure soil, Locke, "Young and American

*Appomattox*," 54; *Geary, Agriculture in Southern U.S.*, 3: 803-804, and *Greene, Soil Exhaustion*, 84-87.

35. Strickland, *Observations on Agriculture*, 34; Isaac Weld, *Travels Through the States of North America, and the Provinces of Upper and Lower Canada, During the Years 1789, 1790, and 1792*, 2 Volumes (London 1840), 1: 224-228; Quilick to Kenneth Geddis, December 17, 1789, David Geddis's Papers, 1749-1789, 1849, Virginia Historical Society, Richmond; Virginia Governor YVREY, *Diaries of Washington*, 3: 125 (October 14, 1790); *Alexandria Advertiser*, August 8, 1790; *Times, and District of Columbia Daily Advertiser*, June 8, 1800. See also, Thomas Ludwell Lee to George Carter, June 7, 1800, Edmund Jennings Lee Papers, 1769-1800, 1769, who lamented that his wheat had been attacked by both "a worm" and "the fly." Virginia farmers benefited from the fact that the fly first attacked the middle colonies in the 1770s. When the British government issued a proclamation in 1785 prohibiting the importation of American wheat to stop the spread of the insect, American agricultural societies responded by thoroughly investigating the fly. Still, the question of how to control the pest remained unresolved when it reached Virginia; see Haulle, *Scientific Revolution in America*, 184-185. The British lifted the ban in 1792; see, [Buckmaster], *Eastern Observer*, March 27, 1790.

36. New varieties of wheat, *Columbian Mirror* and *Alexandria Gazette*, May 14, 1794; August 27, 1799; October 2, 1800; *Alexandria Advertiser and Commercial Intelligence*, August 8 and September 30, 1800; March 30, 1805; *Alexandria Advertiser*, August 2, 1790; *Times, and District of Columbia Daily Advertiser*, June 6, 1800; Sowing and drying; [Unidentified Farmer's Friend], March 27, 1790; *Columbian Mirror* and *Alexandria Gazette*, August 18, 1789; *Times*; *Alexandria Advertiser*, August 9, 1790; *Times*; *Times, and District of Columbia Daily Advertiser*, September 28, 1800 (sowing wheat); July 23, 1801 (dried); July 27, 1801 (sow lower and broadcast); *Alexandria Advertiser and Commercial Intelligence*, December 5, 1803 (sowing wheat); *Alexandria Daily Advertiser*, November 5, 1805 (sow drying and sow).

37. *Alexandria Advertiser and Commercial Intelligence*, June 14 (Oglethorpe), and August 8, 1800 (congressional). The experience of Douglass's estate showed that in 1800 he produced 390 bushels of wheat on sixteen acres (about twenty-two bushels per acre), a remarkably high yield in Fairfax County where David Stuart had estimated that well-manured land produced ten to fifteen bushels per acre; see *Alexandria Daily Advertiser*, May 9, 1800, and Chapter 3, note 5.

41. *Alexandria Daily Advertiser*, October 18, 1803, and *Alexandria Examiner*, September 5, 1803 (only 4th); February 3 (1804) and November 11, 1803 (Swell). Swell published his and chemistry study in 1806 as *Plain Discourses on the Nature and Properties of Matter, Containing the Elements or Principles of Modern Chemistry, with Many Particular Details of those Practical Parts of the Science Most Interesting to Mankind, and Connected with Domestic Affairs* (New York: Moulton & Bennett, 1806) see also Swell to Jefferson, August 23, 1803, and Jefferson to Swell, August 20, 1803. Jefferson Papers, LC.

42. On Taylor see Chapter 2. George Field, *Long Discovery, Extensive Information, to Planters and Farmers, Relative to Fertilizing Poor and Exhausted Lands, Upon a Cheap and Easy Plan, With some Remarks on Distilling and Gasmaking* (Winchester VA: J.A. Lupton 1807) passage. Field was from an extremely modest background; the 1780 tax list records only 3 white dependents and the 1787 tax list only one horse and one cow, see: *Books of Records at the First Census of the United States taken in the Year 1786, Records of the State Legislatures, 1782-1785, Virginia* (Washington: Government Printing Office, 1898), 25, and Nora Schuchman-Yudin, and Florence Spedden-Lowe, eds., *The 1787 Census of Virginia...*, 3 Volumes (Springfield VA: Genealogical Books in Print, 1987), 1: 577.

43. Jefferson to Sir John Sinclair, and Jefferson to William Strickland, both June 20, 1803. Jefferson Papers, LC. Rodney H. True, "John Bates of London," *Wilkes and Mary: Quarterly*, 2nd Ser., 3 (January 1933): 20-26. Schriver Yudin and Lowe, *1787 Census*, 3: 26. John A. Bates, *A Treatise on Fertilized Potatoes, Radishes and Particularly the Following Subjects*, see: *The Use of Potatoes of Furs*, with Directions for Using It, and General Observations on the Use of Other Manures, On Good Fertilizing, Thick Sowing of Cereals, Method for Preserving Fruit Trees from Destroying, and Potatoes in General (Fredericksburg MD: John B. Colvin 1803), 1-4, 31. For more on these and agricultural improvement in northern Virginia generally see: Harrison, *GMA*, Frances Williams, 1: 260-271, Harrison Williams, *Journal of London: An Account of the History and History of a Northern District of Virginia's Northern Neck* (Richmond: Garrett and Moore 1986), 100-104, N.F. Dubell, "Some Fragments of an Extended Report on the Post-Revolutionary History of Agriculture in Virginia," *Wilkes and Mary Quarterly*, 1st Ser., 30 (January 1918): 183-187. *Geop. Agriculture in Virginia, U.S.*, 2: 773-800, 804, 808, and Crooke, *Soil Laboratory*, 161-168.

44. *Treatise on Fertilized Potatoes*, 1-40, 45-70.

45. *Ibid.*, 54-55.

46 *Ibid.*, 42-43; Williams, *Legends of Loudoun*, 185 (quote). Jemmy who immigrated to Loudoun County from Pennsylvania before the Revolution, owned *Stevens Manor*. His estate and pool taxes for three tobacco in 1787. He bought his first gristmill sometime before 1792 and sold Emma one too in 1794. see Schwaner-Yostes and Love, *ITEL Census*, 140 and *Time "House of Loudoun,"* 26-28. Though gristmills, clover and dairy farming remained the central components of Bacon's system, he proposed a number of other reforms. These included the use of animal manure both to enrich the soil and keep the pens of livestock clean, thick sowing of wheat. Skane argued that farmers should sow one and a half bushels of seed per acre rather than the usual half bushel, and the avoidance of eye, which he considered "the greatest impediment to the growth of any crop that can be cultivated" see *Treatise on Practical Farming*, 41-44, 51-54, 58-59.

47 Greven, *Paul Richardson*, 108-110; Lowrey, "James Madison," 168-187 (quote); Charles W. Tatum, "Virginia Agricultural Reform, 1810-1860," *Agricultural History* 35 (July 1961), 50-65; *idem*, "Virginia State Agricultural Societies, 1801-1860," *Ibid.* 38 (July 1964), 187-177; G. Mifflin Berriden, "Agricultural Reform in Antebellum Virginia," *William Galt, Jr., A Case Study*, *Ibid.* 32 (July 1958), 204-206 and Dunbar, *Tools and Implements*, 51-60. Still, if most historians agree with Greven, they disagree widely over when reform began and why there was so little reform. For example, Eugene Genovese argues that slavery hindered efforts at agricultural innovation. Slave labor prevented agricultural diversification by impeding the development of local markets and checked export that might otherwise have been invested in fertilization and new implements. Genovese, *Political Economy of Slavery*, 114-115. In contrast, Frederick Barth contends that the South's steady work and evolving climate ensured that improvements devised in the middle colonies, with no different soils and climate, were adopted for Southern farmers. Barth, *The Roots of Southern Discontent*, Tobacco and Society in Danville, Virginia, 1780, 200; Chapel Hill: University of North Carolina Press, 1981), 66-74, see also James Baker, "The Limits of Agricultural Progress in the Nineteenth-Century South," *Agricultural History* 49 (April 1975), 202-212 (quote). Barth and Baker argue that the James River constituted a geographical and climatic boundary below which agricultural reformers had little relevance. Greven argued that a plethora of ineffective reforms discouraged innovation and generated doubt about the wisdom of specific suggestions. He added that the financial troubles of several improving farmers—including Jefferson, James Madison and John Taylor—worked to dissuade smaller farmers from embracing reform. Greven, *Paul Richardson*, 108-112. In his study of George and Gwynne counties in Virginia, Thomas Schoonerbach argues that agricultural innovation was driven by large planters' attempts to maintain the self-sufficiency of their plantations, small farmers generally

derived from slaves until the development of transportation links and market opportunities in the 1830s. Schlotterback, "Plantation and Farm, Social and Economic Change in Orange and Greene Counties, Virginia, 1740-1800." Ph.D. Dissertation, Johns Hopkins University, 1950: 155-209. In his study of Frederick County, however, Warren Heltzer contends that farmers—who produced wheat for the Alexandria market, exchanged slaves because the rest of the county remained sterile and profitless without improvement. Heltzer, "Three Free Peoples: Frederick County, Virginia, 1735-1840." Ph.D. Dissertation, University of Virginia, 1960: 179-201.

48. *Virginia Gazette and Alexandria Advertiser*, August 5, 1766, see also *Town and District of Columbia Daily Advertiser*, September 26, 1793. *Pease & Truitt, on Systematic Farming...*, Second Edition (Richmond, 8. *Financial*, 1864, 1:2-3, 1-6, 47-48, 73-82.

49. Jefferson, *Notes on the State of Virginia*. William Faden, ed. (Chapel Hill: University of North Carolina Press, 1964): 180-182. Letter from Washington to Young, 94. *Quaker American Husbandry*, 181-182, 171-181, 196. A.G. Kersey, ed., *The Journal of Nicholas Greenwell*, 1774, 1772-1780. New York: Dual Press, 1999, 49. Warren Heltzer, "The Virginia Backcountry in the Eighteenth Century." *The Virginia Magazine of History and Biography* 181 (October 1993): 505-526; and John D. Martin, *Commercialism and Frontier: Perspectives on the Early Shenandoah Valley* (Charlottesville: University Press of Virginia, 1977): 4-6, 178-179, 250-280. Elsewhere in America contemporaries and historians have made a similar connection between wheat cultivation and an indigenous and pauperous population—see, for example, *Beards, Race of the U.S.A.*, 2, 254-256 (describing western Maryland); Harry Roy Merwin, *Colonial North Carolina in the Eighteenth Century: A Study in Historical Geography* (Chapel Hill: University of North Carolina Press, 1964): 129; and James T. Lemon, *The First Free Man's Country: A Geographical Study of Southwestern Pennsylvania* (New York: W.W. Norton, 1978; originally published, 1972).

50. *Pease, Truitt, on Practical Farming*, 1, 5-6, 24-25, 50. *Virginia Journal and Alexandria Advertiser*, December 2, 1764.

51. *Virginia Journal and Alexandria Advertiser*, December 2, 1764 (Wilson & Campbell); October 18, 1765 (John Taylor); *Virginia Gazette and Alexandria Advertiser*, April 22 (John Lowmeyer and Harshbarger & Bone Hoop) and August 12, 1765 (Murray & Whitcomb); January 22, 1764 (John McPherson); January 12, 1766 (James B. McNeill); and May 14, 1766 (Joseph Fowkes). *Colonialist, Mirror and Alexandria Gazette*, August 12, 1766 (Philip Magruder); February 12 (James's Friend) and April 12, 1766 (William Harshbarger); March 26 (J.G. Laid) and October 2, 1800 (James & Milne). *Alexandria Advertiser*, April 4, 1766 (Henry Lewis). *Alexandria*

*Advertiser and District of Columbia Daily Advertiser*, November 3, 1798 (Samuel Ferry); *Times and District of Columbia Daily Advertiser*, February 12 (Dickens, Newton & Co.) and October 24, 1801 (Alexander and Allison); *Alexandria Advertiser and Commercial Intelligence*, September 18 (J. & T. Powell) and December 22, 1803 (Shenstone selling plaster by ton or by the bushel); January 25 (Glassey & Peacock) and October 18, 1800 (John W. Leonard); February 28 (Daughton & Mandeville); March 18 (W. Hanagan), June 8 (William J. Hall), July 14 (Glenall M'Clure), July 25 (P. Carey) and December 9, 1800 (Murray & Parnon have 1800 tons for sale); *Columbian Advertiser and Commercial, Mechanical, and Agricultural Gazette*, October 8, 1802 (Alexander Smith); *Alexandria Daily Advertiser*, July 2 (Lawrence & Powell) and July 29, 1800 (W. Truett).

52 *Alexandria Daily Advertiser*, April 30, 1804 (Mandeville); *Alexandria Gazette*, December 26, 1800; February 24; March 3, 27; April 17, 1804; and November 21, 1800 (JWC press). Orpans seems to have been substantially wage slaves in Alexandria. In 1801 Alexandria merchant Joseph Radcliffe charged H. Stenberger \$11 per ton for ore. Radcliffe to Stenberger, January 7, 1801. Joseph Radcliffe and Company, *Alexandria City Letter Book*, 1800-1803, 1804, LCN.

53 *Alexandria Advertiser and Commercial Intelligence*, August 9 (Gault) and November 2, 1803 (Daley); *Alexandria Daily Advertiser*, May 6 (Gault) and September 6, 1800 (Jonathan Swift). For more examples see *Alexandria Advertiser and Commercial Intelligence*, September 26, 1801, August 28, 1803, July 18, 21, and November 18, 1800; and *Alexandria Daily Advertiser*, March 3 and June 25, 1804.

54 *Diaries of Washington*, I, 373-374 (May 7, 1792), Pease; *Agricultural Repository*, 76 (Washington to Edward Cherrington, December 2, 1799); *Diaries of Washington*, II, 458-461 (Letter to J. P. Moore, April 3, 1804). *Mirror Family Papers*, 1804-1808, V448 (James Thompson to Priscilla Tarnum, 40-44). *Alexandria Advertiser and Commercial Intelligence*, August 9, 1802; and *Alexandria Daily Advertiser*, October 18, 1800. Washington saw a particularly successful display of plaster of paris in Pennsylvania in 1787 at the farm of 'van Jones', see *Diaries of Washington*, I, 303-309 (June 10, 1787).

55 *Virginia Gazette and Alexandria Advertiser*, March 14, 1790 (John Norwood); *Columbian Mirror and Alexandria Gazette*, March 26 (John Laid), and April 12, 1798 (Joseph & Samuel Harper); February 3, 1790 (James Allison); *Times and District of Columbia Daily Advertiser*, August 27, 1798 (Robinson Fenwick); and *Alexandria Advertiser and Commercial Intelligence* (Dickens, Newton & Co.). For the 'business' see *Columbian Mirror and Alexandria Gazette*, February 15, 1790 (J. Spence); *Alexandria*

Examiner, April 11, 1800 (John McClellan), and March 15, 1805 (Nicholas Rappoport). For price listing see, *Columbian Mirror* and *Alexandria Gazette*, May 19 and June 19, 1799.

54. *Virginia Journal* and *Alexandria Advertiser*: September 5, 1794 (Doro) *Alexandria Daily Advertiser*, August 27, 1800 (Phoenyx), and March 29, 1804 (Monday). *Texas*, and District of Columbia *Daily Advertiser*, November 22, 1794 (Kismet). For more examples see, (Winchester) *Virginia Centinel*, August 26, 1798, June 24, July 1, August 18, 1799, February 24, 1801, March 17, 1798, *Virginia Virginia Centinel & Gazette*, November 10, 1790, March 16, April 8, August 20, and September 28, 1791, *Potomack Guardian & Northern Advertiser*, August 28, 1800, September 5, 1792, February 20 (March), March 2 (June), August 5, September 5 (July), and December 28, 1798, March 22 (June), September 22, and December 22, 1798, *Virginia Journal* and *Alexandria Advertiser*, February 26, July 12 (July), August 12, and September 27, 1794, January 27 (July), July 14 (July), and September 5, 1795, May 13, June 15, and 20, 1796, October 4 and 18, 1787, *Virginia Gazette* and *Alexandria Advertiser*, November 5, 1789, June 3, 17, and 24, 1794, *Columbian Mirror* and *Alexandria Gazette*, November 6, 1794, May 20, August 5 and 22, 1795, January 21, 1800, *Alexandria Advertiser*, October 26, 1791, March 21, and April 20, 1796, *Alexandria Advertiser* and District of Columbia *Daily Advertiser*, November 29, 1794, *Texas*, and District of Columbia *Daily Advertiser*, April 18, September 2, and December 2, 1796, January 22, and November 24, 1800, March 1, May 21, July 20, and August 28, 1800, June 5, 1802, *Alexandria Advertiser* and *Commercial Intelligencer*, February 9, and October 5, 1801, February 11, May 13, and July 26, 1802, *Alexandria Daily Advertiser*, March 5, August 28, and October 18, 1804, May 2, 28, September 4, 9, and November 18, 1805, *Alexandria Examiner*, March 7, 1800, May 1, 1804. This list is by no means exhaustive.

57. *Sketches of Washington*, 2, 4th (August 22, 1792), Washington to Arthur Young, November 1, 1783, December 4, 1788, *Washington of Washington*, 29, 297, 30, 152, John Taylor, *Address Before a Series of Agricultural Societies, Practical and Political, in Southern Counties*, Fourth Edition (Philadelphia: Whitworth & Young, 1805) originally published, 1810, 33, 157, 408, *Virginia Gazette* and *Alexandria Advertiser*, December 21, 1790 (Phoenyx), *Gold Leaf Repository*, 5, 18, *Texas*, and District of Columbia *Daily Advertiser*, December 21, 1798, April 5, 1806, *Columbian Mirror* and *Alexandria Gazette*, January 2, 1808, Bruce Thorton to Potomac Ferrying, 47-50. In national historians James Aronson argues that "movements of water (as Fairfax County) during this period [1800-1804] indicate that there was widespread ownership of 'patent plows'" (Baltimore, *Fairfax County*, 268. See also Judith O. McGraw, "So Much Depends upon

a Red Wheelbarrow: Agricultural Tool Ownership in the Eighteenth-Century Mid-Atlantic." *Early American Technology*, 103-105, who finds that in Pennsylvania "a little more than half of farmers . . . owned plows (only

58 Gray: *Agriculture in Southern U.S.*, 2-403 Gray is most certainly referring to the long-shaft or southern-valley plow, Ward, *Travels Through North America*, 1-150; *Peconick Quarries & Gravelly Advertisers*, March 31-1790; *Alexander's Advertiser and Commercial Intelligence*, August 24-1800, see also *Northwestern Fairfax County*, 100-170.

59 Miller: *Agriculture and Millers*, 1-180; James Denault to George Denault, April 2 and 30, 1800; George Denault Papers, 1790-1800, *Virgin Revolutionary Journal and Danbush Weekly Advertiser*, May 3, June 9, and November 2, 1790; *Shepherd, Statistical Inquiry*, 1-27-28, 98-99. On the economic decline of Danbush see: *Baltimore, Mid-Prince William*, 2-364-365; Nancy J. Barkley, "The Fate of Danbush, Prince William County, Virginia," *Williams and Mary Quarterly*, 3rd Ser., 4 (April 1954): 98-102; Arthur G. Peterson, "The Alexandria Market Prior to the Civil War," *Williams and Mary Quarterly*, 3rd Ser., 12 (April 1955), 184-206.

60 *Columbian Mirror and Alexandria Gazette*, November 18, 1800; The federal government awarded Denault a patent July 10, 1800, *American State Papers, Miscellaneous*, 1-487.

61 *Columbian Mirror and Alexandria Gazette*, November 18, 1800; *Times and Herald of Columbia Daily Advertiser*, March 5 and June 1, 1801; Joseph Riddle to William Haysburg, Jr. (March) 1801; Joseph Riddle and Company, Letterbook, LCV. The Virginia legislature incorporated the Mutual Assurance Society Against Fire on Buildings, of the State of Virginia at Richmond in 1794. It insured buildings throughout northern Virginia and the lower valley, including property worth some \$70,000 in Alexandria by 1798; see *Shepherd, Statistical Inquiry*, 1-387-389, 412; *Columbian Mirror and Alexandria Gazette*, February 27, 1795; *Peconick Quarries & Gravelly Advertisers*, March 31-1790; Samuel Masters, *Richmond as It Grows* (New York: Arno Press; originally published, Richmond, 1830; 250, and Edwin J. Perkins, *Alexandria Public Houses and Foreign Services, 1750-1812* [Columbia: Ohio State University, 1964], 248.

62 *Alexandria Daily Advertiser*, December 18, 1804; Denault received a patent for the threshing machine November 26, 1804; *American State Papers, Miscellaneous*, 1-421.

63. Alexandra Baily, *Advertising: December 20, 1804* [Donald Frazier, "The Administration and Reform of the U. S. Patent Office, 1790-1830," *Journal of the Early Republic* 3 (Fall 1983): 201-203 (quote 202), Patrick, *Mechanism in America*, 25-26 (quote 26), and a series of articles by Frank D. Proctor: "Proposals for the Patent Act of 1790," *Journal of the Patent Office Society* 36 (March 1994): 187-187; "The Steam Boat Introduction, 1797-1798," *Ibid.*, 40 (September 1994): 211-243; and "Historic Background and Foundation of American Patent Law," *American Journal of Legal History* 3 (October 1981): 208-220.

64. Breidenbach, *Colonial Craftsmen*, 41-42, 49-50; Bruce Yankin, *Benches*, 16-17, 197-198; M. G. Querry, "Introduction, Some Observations on the Craftsmen in Early America," *The Craftsmen in Early America*, Querry, ed. (New York: W. W. Norton and Company, 1941), York, *Mechanical Metamorphoses*, 27-32, 182-212.

65. Patrick, *Mechanism in America*, 50-51; Hinkle, "The American During America's Wooden Age," *Technology in America: A History of Industry and Ideas* (Camel W. Patrick, ed. [Cambridge, MA: MIT Press, 1981]), 14-15 (quote, *ibid.*); "The Evolution of Early American Technology: An Essay," *Early American Technology*, 65-66; York, *Mechanical Metamorphoses*, 29-30, 148-182. As Jefferson pointed out, "Machines which perform the labors of men are peculiarly valuable in a country where there is more to do than men to do it," Jefferson to Richard Claiborne, February 21, 1795, Jefferson Papers, LC.

66. Hinkle, *Evolution and Invention* (New York: New York University Press, 1981), 22-23 and *passim* (quote 18; Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, 2 Volumes [Edinburgh: W. B. Ewing, University of Chicago Press, 1978; edition originally published, London, 1804], 2, 182, 308, 309).

67. See Chapter 5 for full account of economic development in northern Virginia; Bourke's inventiveness would continue. In 1806 he patented a "perpetual oven" or "barnet baking machine," in 1808 a "wheel roller machine," and in 1810 an "instrument for mapping lands," see A. J. Morrison, "Virginia Patents," *Wilson and Mary Quarterly*, 2d. Ser., 3 (July 1932): 198, 203, Miller, *Actuators and Mechanics*, 1, 163, 232.

68. Ella May Turner, James Rumsey, *Flowers in Storm* (Harrisburg: Gettysburg, PA: Mercantile Publishing House, 1879), 37; Hinkle, *Evolution and Invention*, 29-32; *Virginia Journal and Alexandria Advertiser*, June 3 and 17, 1794; July 7, 1795, *Diary of Washington*, 9-10, 253-254 (September 6, 1794). Rumsey has attracted a considerable amount of scholarly attention. Unfortunately, much of the work, particularly the

older studies—is worried by a confusion with establishing that Ramsey provided Pich as insurance a workable steamboat. In addition to Turner's biography see H.A. Gossell "The First American Steamboat: James Ramsey for Inventor, Not John Fitch," *Virginia Magazine of History and Biography* 68 (January and April 1962), 34-38, 124-130; Matthew Page Andrews, "James Ramsey: 'Ingenious Mechanic' and International Genius," *West Virginia History* (October 1958), 5-12. This issue is understandable in light of Ramsey and Fitch's bitter contest over patent rights and financial patronage. More recently, historians have begun to place this contest in a broader context; see for example *Pacific Emigration and Innovation*, 20-22, also *Science in Revolutionary America* 313-321 (esp. "James Ramsey and the Rise of Steamboating in the United States," *West Virginia History* 42 (1995): 39-42; Emily Kemp, "James Ramsey and the Role in the Improvement Movement," *ibid.*, 1-6; Edwin T. Lorton, "James Ramsey Pioneer Technologist," *ibid.*, 7-10; York, *Mechanical Metallurgy*, 180-185-285; Proctor, "Steamboat Inventions," 413-443; also, "Steamboat Patents Before the Founding Fathers," *Journal of the Patent Office Society* 31 (July 1955): 404-422; and also, "The Early Steamboat Plan of John Fitch," *Historical Magazine of History and Biography* 70 (January 1966): 42-50.

48 *Diaries of Washington*, 2: 250-253 (September 2, 1784, James Ramsey, A Short Treatise on the Application of Steam, Wharves at Clouds Shows, From Actual Experiments, that Steam May be Applied to Propel Boats or Vessels of Any Burthen Against Rapid Currents with Great Velocity (Philadelphia: Joseph James, 1784); 4-5; First Washington Ceremony of *Journals of the Continental Congress*, 1774-1782, 34; *Volumen* (Washington: Government Printing Office, 1894-1897), 24: 432-434; *Journal of the House of Delegates of the Commonwealth of Virginia*,.... 1784 (Richmond: Thomas Mathews and William Preston, 1784), 130. For a full description of the pole test see Chapter 3. For the details of Ramsey's and McMichen's partnership see: Articles of Agreement between Ramsey and McMichen, November 1784; "Letters of James Ramsey, Inventor of the Steamboat," *William and Mary Quarterly*, 3rd Ser., 35 (January 1978): 161-163.

49 "Certificate to James Ramsey," Town of Bath, County of Berkeley in the State of Vaiga, September 7, 1784; *Diaries of Washington*, 27: 404; *Journals of the Continental Congress*, 24: 349-350; Proctor, "Steamboat Patents," 405-410; *Papers of James Ramsey* (November 5, 1784, Berkeley County Legislative Petition, LWF, *Records of Large*, 31: 682; *Pendleton to Richard Henry Lee*, August 9, 1782; David John Maye to The Editors and Lectures of Edmund Pendleton, 1784-1802), 2 *Volumen* (Charlottesville: University Press of Virginia, 1967), 2: 482; Ramsey to

Washington: March 18, 1785, James A. Pridgett, ed., "Letters of James Rumsey," *Maryland Historical Magazine* 33 (March 1937): 77. Washington had much to do with the favorable reception in Congress. He wrote to Hugh Williamson, chair of the committee assigned to examine Rumsey and McMillen's petition, that "Mr. McMillen's [and] explanation of the merits of Rumsey's newly invented Boat, is consistent to my ideas, and warranted by the principles upon which it rests. [T]here is no doubt of the safety of the invention. A view of this model, with an explanation, removed the principal doubt I ever had in my mind, of the practicability of propelling against the stream, by the aid of mechanical Power", Washington to Williamson: March 18, 1785 *Writings of Washington*, 33: 297.

71 Rumsey to Washington: March 18, 1785; September 5 and 25, 1786 "Letters of Rumsey": 14-15, 25-26, 136-137; Rumsey, *Short-Traction on Steam*, 5-22 (Johnson's affidavit that Rumsey first broached the topic of a steam-powered boat in November 1784); Washington to Johnson, November 21, 1787, *Writings of Washington*, 38: 313-320 (Washington writes that Rumsey first broached the topic of a steam-powered boat to him at Richmond in November 1784); Joseph Dutton, *Remarks on Mr. John Fitch's Reply to Mr. James Rumsey's Pamphlet* (Philadelphia: Joseph James, 1788); 9 (Oliver Hunter's affidavit that Rumsey first broached the topic of a steam-powered boat to him in November 1784); On Rumsey's tenure as superintendent of the Potomac Company see Chapter 3.

72 Pridgett, ed., *The Autobiography of John Fitch* (Philadelphia: American Philosophical Society, 1878): 113, 114, 143, 161; John Fitch, *The Grandest Steam Boat Hatched, or, a Reply to Mr. James Rumsey's Pamphlet, Showing the True Priority of John Fitch, and the False Design, &c., of James Rumsey* (Philadelphia: Buchanan-Publishers, 1788): 4-8; Washington to Rumsey: January 21, 1788, *Writings of Washington*, 34: 374-376; Fitch to John Fitch, November 15, 1785, *Miscellaneous Legislative Papers*, 1783-8823, LCV.

73 Barnes, *Remarks on Mr. Fitch's Reply*, vi, vii, viii, ix, 1-3, 4-14 (esp. 8, affidavit of Buchanan); Rumsey, *Short-Traction on Steam*, 18-21 (affidavit of Charles Moore and Morris). For a full description of the boiler see, Rumsey, *The Foundations and Ancient Plans of the Following Improvements in Machinery, viz. 1st, A New Constructed Boiler, 2nd, A Machine for Raising Water*, 34. A Great Mill, 4th, A New Mill, &c., (Philadelphia: Joseph James, 1788): 3-4 and *Columbian Magazine* (May 1788): 215 and facing page.

74. Rumsey *Short Treatise on Steam*, 4: 11-13, 21. Henry Backus to Rumsey, December 8, 1787, George Washington Papers, LC. Rumsey to Washington, December 17, 1787, "Letters of Rumsey," 100-140. The demonstrations were widely reported, see, for example, *Virginia Gazette and Winchester Advertiser*, January 11, 1788, and "The First Steam Boat" a 1788 report from the *Boston Journal*, Rumsey's Society Papers, Shepherdstown, West Virginia, 1785-1865, V45.

75. On Franklin's influence see, *Heath, Emulation, and Invention*, 21, 88-89. Forger "Steamboat Fanciers," 100-106 (quote), 111; and also, "Early Steamboat Plans," 14-16. On Rumsey's denial of Franklin's influence see Forger *Steamboats on the Potomac River*, see iv. For a full description of Rumsey's boat and engine see, Rumsey, *Explanation of a Steam Engine, and the Method of Applying it to Propel a Boat* (Philadelphia: Joseph James, 1788) and also, *Short Treatise on Steam*, 6-10.

76. Rumsey to Washington, March 18 and May 18, 1788, "Letters of Rumsey," 142-147 (Rumsey added that if he received an encouragement in Philadelphia he would "push immediately for South Carolina" [143]). *Meetings of the American Philosophical Society*, April 18 and May 2, 1788, 104-110; *Philadelphia Gazette*, September 30, 1788; and Rumsey, *Explanation of Improvements in Mechanics*, 5-6. Dr. Robert Barker, a member of the Royal Society, presented his will in the 1780s but according to the *Philadelphia Gazette's* report on Rumsey "was never able to perfect a" Leyton, "Pioneer Technologist," 11-13, 20-24; provides the fullest description of Rumsey's innovations in sailing. Indeed, Leyton argues that "with sustained Rumsey's First Inven" (12).

77. Rumsey, "Proposals for Forming a Company" to Enshle-James Rumsey to Carry into Execution, on a Large and Extensive Plan, His Steam Boat and Steamy Other Machines: Several other Mentioned," *Reverend's* (Philadelphia, 1788); Rumsey to Washington, May 15, 1788, "Letters of Rumsey," 147-150; Rumsey to Morron, May 14, 1788, "Rumsey, Inventor of the Steamboat," 178874.

78. Rumsey's letters to his brother as how detail his growing dissatisfaction with the society for its refusal to support him adequately. As early as August 1788 Rumsey complained that "the Society that sent me here has actually . . . deserted me having hardly refused" to Enshle's a Credit . . . for me to try the Experiment." By January 1789 he lamented "the Society in America are usually Leasless and Slothful . . . I expect nothing like but a breach with the Society who has certainly behaved Recklessly [and] to me as a Fool [and] great degree." Rumsey's financial distress eventually forced him to seek for a coal company in Ireland, see, Rumsey to Morron, August 4, 1789, "Rumsey, Inventor of the Steamboat,"

35: and January to May 1790, January 5, August 23, and September 13, 1790, James Rumsey. Letters to Captain Charles Murray, 1781-1793. LON.

36: Petition of the Kentonian Society, June 14, 1786, and Petition of Charles Murray, November 16, 1788. Berkeley County Legislative Petitions, LON. *James/Thomas/Guanta*. October 7, 1788. *Turner, Rumsey*. 180-433.

37: Paper. *Patch Autobiography*: 102-103; also, "Steamboat Interference" 432-443. Petition of John Patch, October 29, 1787. Miscellaneous Legislative Petitions, LON. *Rumsey, Statistics at Large*. 12-628-817. Patch published a plan of his canal and paddle boat as early as December 1786; see *Columbian Magazine* (December 1786), 374, and January 1787), 245.

38: Petition of the Kentonian Society, June 14, 1786, and Petition of Charles Murray, November 13, 1788. Berkeley County Legislative Petitions. LON. Petition of John Patch, November 20, 1788. Miscellaneous Legislative Petitions. LON. *Journal of the House of Delegates of the Commonwealth of Virginia*, 1789 (Richmond). John Jones, 1789), 38, 39, 40, 43, 47, 49, 50. "The Art for Working in James Rumsey, Esquire, the Earliest Right and Privilege of Making, Using, and Vending, Irons, Kettles, Machines, and Devices, by Him Invented." *Broadside* (Philadelphia, 1789). Patch. "Petition and Remonstrance Read in the House of Assembly on the Fifteenth instant," *Broadside* (September 12, 1789) (Philadelphia, 1789). Joseph Dumas. "As John Patch has Procured a Number of Hurdles." *Broadside* (September 23, 1789) (Philadelphia, 1789). Patch. "To the Honorable the Representatives of the Commonwealth of Pennsylvania," *Broadside* (September 26, 1789) (Philadelphia, 1789). and Paper. "Steamboat Interference," 432-433.

39: Paper. *Patch Autobiography*: 137-138. *American State Papers, Miscellaneous*. 1. 489. Paper. "Steamboat Interference." 433-444.

40: Paper, *Patch Autobiography*: 199-200, 205. Hurdle. *Experiments and Invention*. 40-44. *Turner, Rumsey*. 141-108. Layton. "Power Technology" 11-13. 18 (see his French patent). *Geoffrey's Magazine* 43 (February 1790), 183. In 1798 the French translator J.F. Brissot de Warville met Rumsey in England. He declared him "a man of genius" whose invention promised to "bring about as great changes in commerce as did the discovery of the Cape of Good Hope"; see *Brissot, New Theory on the United States of America*, 1758. Daniel Eberwein, ed. and trans. and Marc Rasmussen. *French text* (Cambridge, MA: Harvard University Press, 1964, originally published Paris, 1781), 324-190. The same year Jefferson pronounced Rumsey "the most original and the greatest mechanical genius I have ever seen"; Jefferson to Joseph Richard, March 24, 1789, Jefferson Papers, LC.

54 *Virginia Gazette and Alexandria Advertiser*, March 14, 1799. The letter was written by John Brown Cotton to Jefferson, December 34, 1799. Jefferson Papers, LC; John Berle Howard to James Johnson, June 16, 1835, reprinted as "James Brown's Hears, &c.," *House of Representatives Report* 202, 114, 1844 Congress, February 5, 1835 (Berkie relates the contents of a letter in his possession, written by Ramsey to George West, December 5 and 12, 1799 and completed by R.C. Winchfield, December 15, 1799). See also *Madell, Emulation, and Invention*, 94, and Turner, *Emancipation*.

55 *Alexandria Register*, May 15 and 23, 1805. Claiborne to Jefferson, August 23, December 12, 1803, and May 14, 1805. Jefferson Papers, LC. Claiborne (1787-1858) was a native of Brunswick County, Virginia. In early 1781 Jefferson, then Governor of Virginia, appointed him deputy quartermaster general for the state. After this was he transferred to Great Britain, lived in London and tried to sell western lands. He returned to America in late 1794, bringing with him an English "engineer." In Philadelphia he formed a "Mechanical Concern," whose services he offered to Washington and the Potomac Company. Washington, however, declined the offer (citing to Tobias Lear his lack of confidence in Claiborne). By 1800 Claiborne had moved to the District of Columbia and begun his experiments. He moved west in 1804 when he was appointed secretary to the Governor of the Territory of Orleans. At this point, his public experiments ended. See, W.G. Stewart, ed., "Abstracts of Virginia Land Patents," *Virginia Magazine of History and Biography* 1 (January 1894): 223. Alexander Spotswood to Jefferson, November 24, 1794. Claiborne to Jefferson, January 18, 1797 and June 9, 1797. John P. Boyd, ed., *The Papers of Thomas Jefferson*, 39 Volumes to date (Charlottesville: Foundation, University Press, 1950), 4: 158-255, 242-241, 12: 411-413. Jefferson to Claiborne, February 10, 1795. Claiborne to Jefferson, February 16, 1804, August 27, 1805, and July 14, 1806. Jefferson Papers, LC. Washington to Claiborne, December 15, 1794. Washington to Tobias Lear, December 15, 1794 and January 12, 1796. *Writings of Washington*, 28: 12-13, 34, 33-35, 55-57. Claiborne to Washington, December 26, 1794. Washington Papers, LC.

56 *Parvill, Mithras in America*, 45.

## **EPILOGUE** **THE SLAVE SOUTH IN THE EARLY REPUBLIC**

July 4, 1800 found Alexandria as a celebratory mood. The regional economy was booming, and farmers, merchants and artisans profited from an expanding world market for American goods. Flour exports from Alexandria reached an all-time high in 1800 (74,000 barrels) while the 348,000 barrels of flour exported rivaled the peaks reached in 1758 and 1780. In February the Potomac Company had finally completed the canal around the Great Falls making possible an uninterrupted passage between the lower Shenandoah Valley and Alexandria for approximately three months of the year. And in April subscription books had opened for the Little River Turnpike Company which was to build a paved turnpike to link western farmers to the port in all seasons. Proponents could point to Virginia's apparently robust slave population as the wake of Shays's Rebellion, but few people questioned the institution. The region's slave population remained over 20 percent of the total population as farmers adapted their slave labor force to the production of grain.<sup>1</sup>

A.W. Grayson, son of the Grayson family of Prince William County and a member of the Alexandria Debating Society, shared the optimism of the region's inhabitants. Asked to give the Fourth of July oration at Oronot

Church, the town's Anglican chapel, Grayson delivered a speech beginning with confidence and enthusiasm. He began by reviewing the causes of the Revolution and the battles of the war. He saved his most powerful rhetoric, however, for a consideration of the benefits that independence had brought. Most conspicuously, Grayson explained, Americans had perfected "the science of government," learning "what rights to give up, and what to retain." They had created a "republican government" of "comparative excellence," a "treasury of freedom" and "arkway of liberty," situated happily between the extremes of "overbearing aristocracy" and "licentious profligacy."<sup>10</sup>

But the Revolution, Grayson continued, had brought much more than political liberty. Independence enabled the United States to establish a "commercial intimacy" with "the different nations of Europe." The result was "a rapid progress" of American trade. American merchants now "solicited . . . their careers" mainly on "the shores of distant nations," while Europeans, once excluded by Great Britain from trading with America, now shared "in the inexhaustible resources of this immense empire." Equally important, "the arts which . . . before" independence "were blighted by the narrow limits of [import], now flourished under the great auspices of liberty." Similarly, science had prospered since the Revolution. Where once it "had languished near," science under the "protection and assistance" of liberty "became of service to all." Manufacturing, too, despite the

"disadvantage" which a "lashed under" in America, had "been rapidly vanishing" since the attainment of independence. Above all, agriculture had improved and flourished since the end of British rule. Before the Revolution, Oregon asserted, agriculture "had languished." But independence and the liberty it engendered had "raised [agriculture] from that lethargic state which oppression had placed it in."<sup>1</sup> And for the "happy husbandmen" the prosperity of an independent America brought well-deserved "domestic liberty."<sup>2</sup>

Oregon believed that the natural beauty of America played an important role in securing the nation's present and future happiness and abundance. The "matchless natural resources" and "large extent of uncolonized land," he asserted, endowed the United States with the potential to become "an agricultural, manufacturing and commercial nation." But turning this potential into reality required more. Thus, Oregon emphasized the nation's human capital: the key determinant to present and future abundance. First, the rapid growth of the American population. "Doubling once in twenty years," fostered economic development as the population grew America's ability "for engaging in extensive commercial intercourse [and] with foreign nations" increased, as did the nation's "manufactures." More important, the nation's prosperity depended upon "the enterprising [and] spirit of our citizens." "The people of this country," Oregon noted, "are daily opening" the nation's "latent sources of

wealth.<sup>4</sup> In short, a growing and industrious population freed from the fetters of imperial rule promised to transform the United States. "We look forward to the day," Grayson concluded, "when America will hold a primary not secondary rank among the nations of the earth."<sup>5</sup>

Whether independence had transformed America as precisely the way Grayson described remains doubtful. Nevertheless, the Revolution did bring new opportunities in overseas trade, and when northern Virginians acted to exploit international markets by venturing to grain they set in motion a process of regional economic development. The transportation and processing requirements of cereal crops required the creation of new regional transportation routes to link the port of Alexandria with its hinterland and gave rise to new urban centers where the industries spawned by grain farming—milling, baking, brewing and distilling—congregated. The growing population of artisans encouraged by these townships and the labor needs of regions, devoted a series of technological innovations that made northern Virginia a center of technological innovation. Many individuals also supported the creation of banks to provide the capital necessary for further economic development. And farmers, spurred by rising prices, adopted improved farming methods to increase their output, including the widespread use of soil additives and complex forms of crop rotation. In the twenty-five years after the Revolution northern Virginia's economy flourished, and the region's inhabitants believed that the Revolution had

everything to do with their well-being. Grayson's optimism, delivered on the anniversary of independence, reflected the deeply ingrained nature of such beliefs.

Equally striking is what Grayson excluded from his oration. The address could have been delivered in any American town in 1820. He made no reference to the peculiar nature of northern Virginia or the South, apparently attaching little importance to the differences between the sections. Most notably, he made no mention of slavery. Northern Virginia's slave population, of course, set it apart from the northern states: even from the green growing middle states in which the region was most often located. Through a number of residents—including most famously George Washington—tied obligations to the institution, and a notable few such as Robert Carter even freed their slaves, intense debate over it then slavery remained an integral part of northern Virginia's economy even after the switch to wheat.

More important, slavery helped shape the region's cultural life. Many planters and farmers adopted paternalist attitudes towards their slaves, believing it was their Christian duty to treat their black servants humanely. Recording his thoughts about "ye Rights & Obligations" of masters and servants in his commonplace book, slaveholder James Hise of Frederick County argued that masters have a "civil Power over their Domestic" but it must be "managed consistently with Humanity." He believed, like

example, that a master could sell a "servant" only with the servant's consent, and that "Correction" became "plainly excessive" when it went beyond what was "necessary for the good order of the Family." Though in practice many slaveholders failed to live up to such standards, the ideal of paternalism thrived. Eliza Collins Lee, the young wife of Richard Stuart Lee, marveled that her husband's Fairfax County slaves had "not the taint of slavery amongst them[,] they are all neatly clothed and well fed." In reality a master was Lee, convinced Eliza, that "his presence" among the slaves "between joy and gladness moved them [sic] Home."<sup>10</sup>

Lee's experience also reveals the primacy of northern Virginia society; her gender circumscribed her role in raising the slaves and managing the domestic economy. Yet despite her northern society she did not question the slave system or her place in it. Indeed, she embodied the ideal of the southern lady: self-aware and loyal to her husband "Mr. Lee," and a paragon of virtue and kindness constantly "at work" on behalf of her slaves. Still, such lives could be isolating and confining. Anne Marie Thornton, wife of Dr. William Thornton, acknowledged that there was "a little vanity" in her life that her duty because "rather an account of my husband's transactions than mine." While her husband, a District of Columbia commissioner, conducted public business she filled her days (according to her diary) with shopping, hunting and recreation. After another round of "tea" with her neighbors she groaned, "I'm thinking a

very stupid." Yet Thornton reserved such criticism for her diary, which otherwise recorded the mundane details of her life as a dutiful wife. As Elizabeth Fox-Genovese has noted, women such as Thornton could not conceive of any alternative "model of womanhood." Though subordinate to slaveholding men, southern mistresses "benefited from their membership in a ruling class." Thus, they helped to perpetuate slavery by adopting the behavior and attitudes expected of the southern lady.<sup>14</sup>

Further down the social scale, many women found it necessary to leave the domestic sphere in order to support themselves and their families. They discovered, however, that the gendered nature of southern life and the marketplace restricted the type of work they could perform. In Alexandria, for example, the leading female occupation in 1808 was washerwoman. Of the 124 women listed in the census of the town, half labored in this lowly trade. Another fifty-two or 54 percent were seamstresses or weavers, while seventeen (8 percent) ran bookstalls/shops, taverns, or shops which specialized in groceries. Apparently, southern gender norms constrained significant numbers of women working outside the home as long as they entered occupations which reflected their "domestic" responsibilities. In fact, the 1808 census identifies only seven women (3 percent) who labored in "nontraditional" trades (a shoemaker, a cartman, a wagoner, a millwoman, a "beaver,"<sup>15</sup> and two washermen).<sup>16</sup>

*Outlets of Alexandria a number of women ran their own taverns. In* *Martinsburg*, for example, women owned and operated two of the town's eight taverns in the late 1790s. One of these owners, Elizabeth Armstrong, provided "a full supply of every requisite of the first quality, necessary for the comfort, pleasure, and satisfaction of the citizens and travellers." <sup>32</sup> *Monticello* Jane Myers, widow of a Potomac Company engineer, opened a small tavern in 1789 hoping to capitalize on the flow of traffic through the road at the Great Falls. And in *Smithfield*, Berkeley County Jane Wilson operated an ordinary in 1789 where she assured customers of an "unobscured attention to business, and a constant supply of good liquors." Through the gender norms of southern society restricted the work women could perform, the similarity between the tasks of the tavernkeeper and the functions of the housewife—providing food, drink and lodging—seems to have made such crossing of gender boundaries acceptable."

Thus, patriarchy shaped profoundly the nature of social life in northern Virginia. Equally pronounced was the region's attachment to the South's traditional honor ethic. The region's elite frequently entered into confrontations, many of which ended in violence, in order to defend their public reputations and family name. When Alexandria merchant David Farley declared that he "would not entrust the life of a dog to Dr [Quartermaster] Campbell's hands," the doctor required Farley to issue a public apology or he would "demand . . . that satisfaction to which every gentleman

is entitled "Like honor-bound chieftains throughout the South, Campbell threatened violence to preserve his public reputation. Further west in Utah, Berkeley County Captain George Thomas challenged "Captain Rutherford" to a duel in 1760, but was refused. Thereafter Thomas publicly boasted that he had "defeated" Rutherford. Major R.D. Blackburn, an associate of Rutherford's, responded to the slight by attacking and killing Thomas. Despite numerous witnesses to the attack, a Berkeley County jury acquitted Blackburn. Apparently, the defense of personal honor justified violence.<sup>2</sup>

The honor culture of the South also permeated the political life of northern Virginia. For example, the appointment of Republican Francis Peyton to the command of the District of Columbia's militia aroused the ire of many local Federalists. They did not, however, attack Peyton for his political allegiances, but instead accused him of being "destitute of the courage necessary for an officer." According to one Federalist writer, Peyton had been involved in an altercation with John T. Roberts, an Alexandria merchant, some years earlier. Roberts had witnessed some "degrading personal indignities" to Peyton, who had, according to the writer, "voluntarily and passively" submitted to the assault. By maligning Peyton's character in this way, local Federalists hoped to achieve their political end.<sup>3</sup>

Faced with a charge which seriously impugned his public reputation, Peyton immediately acted to defend himself. He called on Walter Jones, a witness to the altercation, to testify on his behalf in the local press. Jones's

version of the quarrel differed significantly from the Peabodys' version. He recounted that after some "irrelevant language" passed between Roberts and Peyton at a *Massachusetts* coffee house, Roberts "violently" abused Peyton. In response, Peyton pulled a chair while Roberts swung at him with his cane. After both men drew blood with "severe" blows to the head, they dropped their weapons and "closed with each other," remaining locked in combat until "separated by the interposition of other persons." This public display of "integrity," Jones argued, proved that Peyton was fit to command. Conversely, no one questioned the propriety of a public figure becoming involved in a what was essentially a bar brawl. The defense of one's personal honor apparently superseded any concerns for public order.<sup>12</sup>

Such examples could be multiplied. However, the point is clear: Northern Virginians clunged and reinforced values—paternalism, patriarchy and honor—long associated with a distinctive southern society and culture. These values, many historians argue, set the South on a trajectory different from the North where the American Revolution gave rise to an increasingly commercial, individualistic and market-oriented society. Yet many of the changes in southern society, particularly the development of a liberal, commercial economy, also emerged in northern Virginia after the Revolution. Here, as a region committed to slavery, planters became farmers in response to world markets for growing local leaders cleared rivers and built roads to facilitate market production, local entrepreneurs

expanded existing towns and created new ones in the hope that they would become local marketing and manufacturing centers, local merchants and farmers compensated for financial restrictions by fictitious currency development, and local projects developed new technologies to lower high labor and transportation costs and increase agricultural output. In short, in the wake of the Revolution northern Virginians unified the same sense of optimism and opportunity, the same "projecting spirit," that so transformed the northern states.

Little wonder, then, that contemporaries found the town of Alexandria and its hinterland so vibrant. Johann Schöpf commented on Alexandria's rapid growth in 1788, noting that "many new buildings, wharves, and warehouses" had "gone up within a brief space, and new settlers are every day coming in." These new arrivals, Schöpf continued, were "drawn by the activity of trade."<sup>1</sup> Robert Hunter, who visited the town in 1788 and stayed with some of its most prominent merchants, agreed that it was "a very growing place" where there "seems to be an unusual deal of business carrying on."<sup>2</sup> The same year Luigi D'Artigiani predicted that Alexandria would "become one of the most prosperous commercial cities" in America. A decade later the town continued. Thomas Pownall, another visitor, marveled at the "number of people employed in carpenters and masons." Everywhere he looked in town "the hammer and trowel was at work." The pace of new building work impressed long-time residents

Richard Dismore, the editor of the *Republican Alexandria Reporter*, viewed the construction of a new bank building as "an additional proof of the fast increasing [sic] prosperity of this town." Surrounded by "a country fertile and populous," Alexandria, he concluded, possessed "the industrious and enterprising . . . a vast reward . . . for commercial and mechanical industry."<sup>12</sup>

Oleq Wines believed Alexandria's future prospects so great that he moved to the town from Providence, Rhode Island in 1768 and established a mercantile business with fellow northerner Joseph Jenkins. Alexandria "appears to be flourishing," he wrote home "in every [sic] new Buildings going up - Wharves filling out, & other marks of profitable Business." Wines soon plunged into the social and civic life of the town, joining the Alexandria Society for the Promotion of Useful Knowledge, associating with its leading figures, and in running for (and winning) office in the town's government. The letters home to his wife (who remained in Rhode Island) reveal his growing familiarity with and comfort in his new environment. Each letter found him more at home in northern Virginia. "The People of Alexandria," he assured his wife in early 1767, "are friendly to us." A few months later he announced "we are considered as Alexandrians." "You see," he explained the next year "we [Jenkins and Wines] live socially" in Alexandria. In short, though Wines found the separation from his family difficult at times, he acknowledged that Alexandria was an agreeable and profitable

place to live. Be at home was he that in late 1788 he moved his family to the town.<sup>12</sup>

Olney expressed some surprise at how easily he adapted to the social and economic surroundings of Alexandria. No doubt, he had picked up many northern preconceptions about "the free South." Travel accounts, for example, were filled with descriptions of free plantations operated by the southern elite, more concerned with horsebreeding and hunting than farming, and attended by elegant black servants.<sup>13</sup> Certainly, these accounts - written by contemporary travelers and reported by historians of the South - contain considerable truth. Still, they hide as much as they reveal. For what is most notable, finally, about northern Virginia in the years after the Revolution is that the region and its inhabitants combined commerce and risk-taking, industry and ambition, a pioneering and pioneering spirit. Looking at the South from the perspective of the Civil War and the cotton economy, historians have chosen to emphasize the traditional aspects of the society. However, to look at slavery in the South - and in particular in northern Virginia - is to risk losing a complete picture of a complex region. In the early republic northern Virginians celebrated independence and the commercial opportunities that it offered. They also remained ardently attached to the institution of slavery and a patriarchal social order. Moreover, few residents of the region viewed any contradiction between their patriarchal and profit-oriented impulses. While the economy broad-

as it did with periodic disruptions to 1850-slavery and the South's traditional values appeared no impediment to economic development. Thus in the years after the Revolution northern Virginians forged a distinctive variant of economic liberalism.

### Notes

1. See Chapter 1, esp. note 85 on the region's slave population, and Chapter 1, note 93 for details of slave unrest in northern Virginia.

2. *Alexandria, Advertising and Commercial Intelligence*, July 3, 1800. Gwynne was the son of William Gwynne, Danvers lawyer, with the camp to Washington and established the U.S. Revenue from 1799-1799; see T. Michael Miller, *Antiques and Merchants of Alexandria, Virginia, 1780-1860*, 2 Volumes (Bowie, MD: Heritage Books, 1991 [1998], 1: 130-2: 212, "Pioneer Papers," *Virginia Magazine of History and Biography* 37 (April 1991): 158 and Robert A. Rutland, ed., *The Papers of James Madison, 1723-1791*, 3 Volumes (Chapel Hill: University of North Carolina Press, 1970), 1: 30.

3. *Alexandria, Advertising and Commercial Intelligence*, July 3, 1800.

4. *Ibid.*

5. *Immer White, Commonwealth Book*, 1755, 1510-1505, Virginia Historical Society, Richmond, Virginia (hereafter VHS) 14-02 Elizabeth Lee to Sarah Ann Colfax, July 15, 1797, Richard Bland Lee Papers, 1766-1836 VHS. The best statement of the paternalistic nature of southern slaveholders is Eugene Genovese, *Roll, Jordan, Roll...The World the Slaves Made* (New York: Vintage Books, 1976) originally published, 1964, 3: 149-60, 665, and *passim*. In the wake of Genovese's work the concept of paternalism has become widely accepted by historians, see, for example, Peter Kolchin, *American Slavery, 1619-1861* (New York: Hill & Wang, 1993): 111-126.

6. Lee to Colfax, July 15, 1797, Richard Bland Lee Papers, VHS. Washington C. Ford, ed., *Diary of Mrs. William Thornton, 1800*, "Records of the Colonial Historical Society" 19 (1907): 113 (March 15: 163 (July 2), Elizabeth Fox-Genovese, *Working the Slaves: The Household, Black and White Women of the Old South* (Chapel Hill: University of North Carolina Press, 1990): 37-66, 124-27, *passim*, p. 44. On the gender conventions shaping women's lives in the Old South see *ibid.*: 180-843, Anna Foor

Scott, *The Southern Lady: From Pedestal to Politics, 1830-1880* (Chicago: University of Chicago Press, 1976), esp. 4-11, and Catherine Clinton, *The Plantation Mistress: Woman's World in the Old South* (New York: Penguin Books, 1982), iv, 5-6, 14-15, 61-62, 87-88, 140-141, 161-162, 228-231. Though Fox-Grosvoss, Scott and Clinton agree that slaveholding women held a subordinate position to men in the patriarchal society, they disagree sharply over women's relationship to slavery. Clinton and Scott argue that slaveholding women suffered under heavy workloads and responsibilities within the home, rarely escaped the drudgery of isolated plantations, bore the burden of frequent childbirth, and were completely subservient to their husbands. Women were, in effect, victims of slavery, the "slaves of slaves." As a result, they contended, many northern women became disaffected from the slave system and a few even questioned the morality of the institution. Scott, *Southern Lady*, 48-62, and Clinton, *Plantation Mistress*, 18-26. I have found no evidence that the white slaveholding women of northern Virginia ever questioned slavery.

7. 1808 Census of Alexandria, reported in Mallon, *Alexander and Merchants*, 2, 385-386. "To complete the list of women in the 1808 census" Twenty-three women, most of whom were widows, were identified as "prostitutes" (11 percent) in addition to those female tutors (2.5 percent), two "jaegers" (1 percent) and three women with unknown occupations (1.5 percent). On the gendered nature of the marketplace and economic life in early America, see Allen Kikkioff, *The American Dream of American Capitalism* (Charlottesville: University Press of Virginia, 1980), 29-60, Toby L. Ditz, "Suspended" or "Stagnant" Impoverished: Nineteenth-Century Representations of Poverty and the Gendered Self in Eighteenth-Century Philadelphia," *Journal of American History*, 81 (June 1989), 61-90; James Boylston, "The Woman Who Wasn't There: Women's Labor and the Transition to Capitalism in the United States," *Journal of the Early Republic*, 10 (Summer 1990): 185-206; and Sarah F. McLeskey, "Laying Foundations: Gender, Domestic Religion, and the Technology of Food Preservation in New England Households, 1750-1850," *Early American Technology: Making and Doing Things from the Colonial Era to 1850* (Jawahar Malhotra, ed. [Chapel Hill: University of North Carolina Press, 1994], 293-303).

8. *Potomac Guardian & Northern Advertiser*, March 31, 1798; *Armstrong's*, November 2 (Nancy Graham, Martinsburg), and December 28, 1797 (Wilkes); *Columbian Mirror and Alexandria Gazette*, August 22, 1798 (Miss Myers). Virtues in the Great Falls often made mention of the "woman maker" Mrs. Myers and her tavern; see, for example, John Davis, *Tenets of Five Years and a Half in the United States of America, During 1798, 1799, 1800, 1801, and 1802*, A.J. Morrison, ed. (New York: Henry Holt and

Company 1868; 371, and William Parker Cutler and John Perkins Cutler, *Eds. Journals and Correspondence of Rev. Massachusetts Cutler, LL.D.* 2 Volumes (Cincinnati: Robert Clarke & Company 1864; 2: 61

9. *Columbian History and Alexandria Gazette*, January 13, 1799 September 6, 13, 1799. On the pervasiveness of the South's lower culture see, *Boston's Wyatt Brown: Southern House, Slave, and Politician in the Old South* (New York: Oxford University Press 1992).

10. *Columbian, Advertiser, and Commercial, Mechanical, and Agricultural Gazette*, September 29 1802. On the ways in which lower shaped the political life of the South see, Kenneth Greenberg, *Slavery and Politics: The Political Culture of American Slavery Politics* (Johns Hopkins University Press 1985) esp. 4-43; and Christopher John Olsen, "Community, Slavery, and Secession in the Deep South: Mississippi's Political Culture, 1840s-1861" Ph.D. Dissertation, University of Florida 1996.

11. *Columbian, Advertiser, and Commercial, Mechanical, and Agricultural Gazette*, September 29 1802.

12. Johann David Schompf, *Travels in Confidentiality, 1753-1754*, 2 Volumes A.J. Morrison, ed. (New York: Syracuse Publishers 1992) originally published 1756; 1: 383 Louis B. Wright and Marion Tisdig eds. *Sketches in Carolina in 1753-1755: Being the Travel Diary and Observations of Robert Hunter, Jr., a Young Merchant of London then Minor* CA, Huntington Library 1946; 390 Antonio Pece trans and ed., *Louis Cartagena's Enquiry: Travels in the United States of North America, 1783-1785* (Syracuse, NY: Syracuse University Press 1983) 142 Thomas Trawney quoted in William Francis Smith and T. Michael Miller, *A Beggar's Rags: Portents of Old Alexandria, Virginia* (North VA: Denting Company 1988) 39-44, *Alexandria Enquirer*, February 14, 1803.

13. *Olney Winner to Hope Winner*, September 2, 1786 January 18 1817 February 7 March 4 1791 May 13 21, 1788 *Olney Winner Letters* 1786-1788. Library of Virginia, Richmond, Virginia. Contribution of the Alexandria Society for the Promotion of Useful Knowledge," *Broadsides* (Alexandria, VA: Samuel Henson 1788; Miller, *Alexandria and Merchants*, 2: 302-310.

14. For just one example of the stereotypical picture of southern life see, Isaac, *Louis Cartagena's Enquiry*, 184-185, which repeats an account of "the Virginian way of life" from the Philadelphia magazine, the *American Museum*. Being at one which "the gentlemen of fortune" filled his day with eating, drinking, and relaxing, all the while "watched on by his black

slaves. His greatest complaint amounted to nothing "so far as his studies to see his horses, which are seldom more than fifty yards from his house." He continued: "the poor negro slaves & how work hard."<sup>1</sup> Ostigheim, however, argued that such accounts while "true in some respects," were greatly "exaggerated." The is matter of fact," he concluded, "there are many [Virginians] who keep themselves at promoting agriculture and acquiring a scientific education" (196).

APPENDIX 1  
ALEXANDRIA COMMODITY PRICES, 1770-1808

This appendix catalogues as monthly averages the prices of Alexandria's primary commodities—tobacco, flour, wheat, and corn—between 1770-1775 and 1780-1808. During the years of the Revolutionary War little data was available (due to the decline in trade) and prices fluctuated widely. As a result, I excluded these years. Price data has been collected from a variety of sources, including newspapers, personal papers, federal export records, and a few secondary works. When more than one citation for a single month existed, I created averages by weighting each price citation equally. Price information is more reliable for those periods when the Alexandria newspapers published price data on a regular basis either in the form of commodity price lists or the prices of bread (from which the price of flour was calculated), and after 1780 when the manifests of outgoing ships from the port of Alexandria began reporting the values of these exports.

Tobacco prices are by the hundred weight (lbw). When the available sources recorded prices by the hophound (which was often the case after 1780), I converted them a hophound weighed 1000 lbs., based on the average weights recorded in Alexandria ship manifests, 1787-1805. This represented a two-ounce the weight of pre-war hophounds which averaged 1000 lbs per

Chapter 2, note 11) Flour is recorded in barrels and wheat in bushels. Oats is also recorded in bushels, though it often left the port of Alexandria in barrels. Following the ship manifests (though contrary to the conversion rate used by some historians), I converted the price of oats per barrel to a price per bushel at the rate of five bushels per barrel. All data comes from Alexandria. Bradford, in the Shenandoah Valley, except in few instances (March 1752, January 1751, April, July and December 1800) when I included Richmond wheat prices. Due to its perishable nature, Alexandria merchants shipped wheat infrequently to overseas destinations. Thus, price data for this commodity was often difficult to obtain.

Finally, for ease of comparison, I rendered all prices in dollars and cents, though it is important to keep in mind that merchants in the late eighteenth century used pounds sterling, Virginia currency, and dollars interchangeably. I used an exchange rate of 22 Virginia currency equals \$1.00 for the years 1776-1778; 22 Virginia currency equals \$3.20 for the years 1783-1808; and £1 Sterling equals \$1.44 (See Bennett).

TABLE A-1. ALEXANDRIA COMMODITY PRICES, 1770-1869

	TOMATOES POUNDING	FLOUR BARREL	WHEAT BUSHEL	CORN BUSHEL
1770				
JANUARY	\$1.25	\$1.25	\$ 75	
FEBRUARY				
MARCH				
APRIL	\$1.60			
MAY	\$1.50			
JUNE	\$1.25			
JULY	\$1.25			
AUGUST	\$1.75			
SEPTEMBER	\$1.25			
OCTOBER				
NOVEMBER	\$1.50			
DECEMBER	\$1.50	\$1.50	\$ 75	
1771				
JANUARY				
FEBRUARY	\$1.75			
MARCH				
APRIL	\$1.50			
MAY	\$1.25			
JUNE				
JULY	\$1.50			
AUGUST	\$1.50			
SEPTEMBER				
OCTOBER	\$1.50	\$1.75	\$ 75	
NOVEMBER		\$1.75	\$ 75	
DECEMBER	\$1.50	\$1.50	\$ 75	

Table A. Continued.

	TORRADO RICHHEAD	FLORIE BARREL	WISLAT RICHHEAD	COHEN RICHHEAD
1978				
JANUARY				
FEBRUARY		\$5.45	\$5.50	
MARCH				
APRIL				
MAY	\$5.55			
JUNE	\$5.55			
JULY	\$5.55		\$5.55	
AUGUST	\$5.55			
SEPTEMBER	\$5.55			
OCTOBER			\$5.55	
NOVEMBER	\$5.55			
DECEMBER			\$5.55	
1979				
JANUARY			\$5.55	
FEBRUARY	\$5.55			
MARCH				
APRIL	\$5.55			
MAY	\$5.55			
JUNE	\$5.55			
JULY	\$5.55			
AUGUST	\$5.55			
SEPTEMBER	\$5.55			
OCTOBER	\$5.55	\$5.55	\$5.55	
NOVEMBER			\$5.55	
DECEMBER				

Table A.1 continued

	TORONTO MICHIGAN	FLORIDA BARCEL.	WHEAT DURHAM	CORN DURHAM
JUN				
JANUARY				
FEBRUARY		00.11	0.00	
MARCH	01.00		0.00	
APRIL	01.00		0.00	
MAY				
JUNE				
JULY	01.00			
AUGUST	01.00			
SEPTEMBER	01.00		0.00	
OCTOBER	01.00		0.00	
NOVEMBER	00.00		0.00	
DECEMBER			0.00	
ITS				
JANUARY	00.00	01.00	0.00	0.00
FEBRUARY	00.00	01.00	0.00	0.00
MARCH	00.00	01.00		0.00
APRIL	00.00	01.00	0.00	0.00
MAY		01.00	0.00	0.00
JUNE	00.00	01.00	0.00	0.00
JULY		01.00	0.00	0.00
AUGUST		01.00	0.00	0.00
SEPTEMBER	00.00	01.00	0.00	0.00
OCTOBER		01.00	0.00	0.00
NOVEMBER	00.00	01.00	0.00	0.00
DECEMBER	00.00	01.00	0.00	0.00

Table A-5-continued

	TOBACCO FUTURES	FLOUR FUTURES	WHEAT FUTURES	CORN FUTURES
1980				
JANUARY				
FEBRUARY				
MARCH				
APRIL	\$4.00		\$ 83	
MAY	\$4.00		\$ 83	
JUNE	\$3.00		\$ 83	
JULY	\$4.00		\$ 79	
AUGUST	\$4.00		\$ 79	
SEPTEMBER	\$4.00		\$ 79	
OCTOBER				
NOVEMBER				
DECEMBER				
1981				
JANUARY			\$ 79	\$ 83
FEBRUARY				
MARCH				
APRIL				
MAY				
JUNE				
JULY	\$3.75		\$ 83	
AUGUST	\$3.75		\$ 83	
SEPTEMBER	\$3.75		\$ 83	
OCTOBER				
NOVEMBER				

Table A.3 (continued)

	TORONTO POCKING	FLORIE BARRIL	WHEAT BARRIL	CORN BARRIL
DECEMBER	\$4.65	\$5.15	\$7.25	
JAN				
JANUARY	\$4.65	\$5.05	\$7.25	
FEBRUARY	\$4.65	\$5.05	\$7.25	\$7.50
MARCH	\$5.05	\$5.55	\$7.45	\$7.50
APRIL	\$4.95	\$5.45	\$7.45	\$7.50
MAY	\$4.75	\$5.35	\$7.45	\$7.50
JUNE	\$4.65	\$5.35	\$7.45	\$7.50
JULY	\$4.55	\$5.35	\$7.45	\$7.50
AUGUST	\$4.55	\$5.35	\$7.45	\$7.50
SEPTEMBER	\$4.55	\$5.35	\$7.45	\$7.50
OCTOBER	\$4.55	\$5.35	\$7.45	\$7.50
NOVEMBER	\$4.55	\$5.35	\$7.45	\$7.47
DECEMBER	\$3.95	\$3.55	\$7.45	\$7.47
JAN				
JANUARY	\$3.85	\$3.55	\$7.45	\$7.47
FEBRUARY				
MARCH	\$3.55	\$3.55	\$7.45	\$7.47
APRIL	\$3.55	\$3.55	\$7.45	\$7.47
MAY		\$3.55		
JUNE	\$3.55	\$3.55	\$7.47	\$7.47
JULY			\$7.55	
AUGUST	\$3.55	\$3.55	\$7.55	\$7.47
SEPTEMBER			\$7.55	
OCTOBER	\$3.55			
NOVEMBER	\$3.55			

Table A.1 (continued)

	TORRADO WOODHEAD	FLORIS THURTEL	WHEAT STUBBL	CORN STUBBL
DECEMBER	\$1.34		\$ 75	\$ 75
JAN				
JANUARY	\$1.55		\$ 75	
FEBRUARY	\$1.65		\$ 75	
MARCH	\$1.80	\$4.30	\$ 75	
APRIL	\$2.05	\$5.50		
MAY	\$2.20	\$5.50		
JUNE	\$2.35	\$5.50		
JULY		\$5.50	\$ 75	
AUGUST	\$2.45	\$4.50	\$ 75	\$ 50
SEPTEMBER	\$2.50	\$4.50	\$ 75	\$ 50
OCTOBER	\$2.55	\$4.50	\$ 75	\$ 50
NOVEMBER	\$2.55	\$4.50	\$ 75	\$ 50
DECEMBER	\$2.55	\$4.50	\$ 75	\$ 50
1988				
JANUARY				
FEBRUARY				
MARCH	\$1.85			\$ 50
APRIL				
MAY				
JUNE				
JULY				
AUGUST			\$ 75	
SEPTEMBER				
OCTOBER		\$4.50		
NOVEMBER				

Table A.1 (continued)

	TOBACCO SPAGNOL	FLORAL PARCEL	WHEAT B. 1000L	CORN B. 1000L
DECEMBER	\$3.40			
JAN				
JANUARY				
FEBRUARY				
MARCH		\$5.40		
APRIL				
MAY				
JUNE				
JULY				
AUGUST				
SEPTEMBER				
OCTOBER				
NOVEMBER				
DECEMBER				
JAN				
JANUARY				
FEBRUARY			\$1.00	\$1.00
MARCH				
APRIL				
MAY	\$6.10			
JUNE				
JULY				
AUGUST				
SEPTEMBER				
OCTOBER			\$1.00	
NOVEMBER			\$1.00	

Table A.1—continued

	TORRADO RIVERHEAD	FLORIE SHARPEL	WHEAT SHARPEL	CORN SHARPEL
DECEMBER	11-23		1-11	1-22
1TH				
JANUARY	12-18		1-11	
FEBRUARY				
MARCH				
APRIL				
MAY				
JUNE				
JULY	11-17			
AUGUST	11-21			
SEPTEMBER	11-24			
OCTOBER				
NOVEMBER				
DECEMBER				
1TH				
JANUARY				
FEBRUARY				
MARCH			1-11	
APRIL				
MAY				
JUNE				
JULY				
AUGUST				
SEPTEMBER				
OCTOBER				
NOVEMBER				

Table A.1 continued

	TORONTO HOCKEY	FLORIS HOCKEY	WEST HOCKEY	ORION HOCKEY
DECEMBER	\$1.45	\$0.40	\$ 0.0	\$ 0.0
JAN				
JANUARY	\$1.45	\$0.40	\$ 0.0	\$ 0.0
FEBRUARY		\$0.40	\$ 0.0	\$ 0.0
MARCH		\$0.40	\$ 0.0	\$ 0.0
APRIL		\$0.40	\$ 0.0	\$ 0.0
MAY		\$1.50	\$1.00	\$ 0.0
JUNE		\$1.50	\$1.00	
JULY		\$1.50	\$1.00	
AUGUST				
SEPTEMBER				
OCTOBER				
NOVEMBER				
DECEMBER				
JAN				
JANUARY				
FEBRUARY				
MARCH				
APRIL				
MAY		\$1.50		
JUNE		\$1.50		
JULY				
AUGUST				
SEPTEMBER				
OCTOBER				
NOVEMBER				

Table A-1 (continued)

	TERRADO HOENEDAS	FLOR BARRIL	WHEAT BUSHEL	CORN BUSHEL
DECEMBER	\$1.49			
JAN.				
JANUARY				
FEBRUARY				
MARCH				
APRIL				
MAY				
JUNE	\$2.85		\$1.54	\$1.47
JULY	\$2.86		\$1.58	\$1.48
AUGUST			\$1.75	
SEPTEMBER				
OCTOBER			\$1.50	
NOVEMBER				
DECEMBER		\$20.40	\$1.75	
JAN.				
JANUARY		\$10.00		
FEBRUARY		\$14.00		
MARCH		\$15.00		
APRIL		\$11.00		
MAY		\$11.00		
JUNE		\$9.00		
JULY		\$7.50	\$1.50	
AUGUST		\$8.00		
SEPTEMBER		\$10.00		
OCTOBER				
NOVEMBER		\$8.00		

Table A.3 continued

	TOMATO HORNHEAL	FLORIN RABBIT	WHEAT BUNNIE	CORN BLIND
DECEMBER		18 10		
JAN				
JANUARY		18 08	21 18	
FEBRUARY				
MARCH		21 11		
APRIL		21 08	21 24	
MAY		21 24		
JUNE		21 20		
JULY		21 20		
AUGUST		21 20		
SEPTEMBER		21 22	21 27	
OCTOBER		21 24		
NOVEMBER		21 24		
DECEMBER		21 24		
JAN				
JANUARY		21 24		
FEBRUARY		21 24		
MARCH		21 24	21 28	21 27
APRIL	18 10	21 20	21 24	21 24
MAY	21 24	21 20	21 24	21 24
JUNE	21 24	21 24	21 24	21 24
JULY		21 24		
AUGUST		21 24		
SEPTEMBER		21 24		
OCTOBER	21 24	21 24	21 24	21 24
NOVEMBER		21 24		

Table A.1 (continued)

	TORONTO HOUSING	FLORIS TANKS	WEST FOOT	CORN FIELD
DECEMBER		50.18		
JAN				
JANUARY				
FEBRUARY				
MARCH		50.60		
APRIL		50.41		5.80
MAY		50.41		
JUNE		50.30		
JULY	55.20	50.41	51.75	5.45
AUGUST	55.50	50.04	51.75	5.45
SEPTEMBER	57.55	50.04		5.75
OCTOBER		50.01		
NOVEMBER	51.55	50.00		
DECEMBER	50.60	50.41		5.47
JAN				
JANUARY		50.35		
FEBRUARY		50.33		
MARCH	51.50	50.34		5.80
APRIL	53.01	50.30	51.50	5.48
MAY		50.50		5.54
JUNE	53.24	50.00		5.48
JULY	54.54	50.38	52.50	5.58
AUGUST	54.90	50.35		5.78
SEPTEMBER		50.38		5.54
OCTOBER	54.54	50.38		5.54
NOVEMBER	54.57	50.38		5.55

Table A.3. (continued)

	FORANCO BUSH/ACRE	FLAVOR BASKET	WINEY PINEAPPLE	CORN, PINEAPPLE
DECEMBER	\$1.80	\$2.10	\$1.43	\$1.69
1994				
JANUARY	\$1.75	\$2.00	\$1.60	\$1.75
FEBRUARY	\$1.65	\$1.90		\$1.70
MARCH		\$1.80		\$1.60
APRIL	\$1.75	\$2.00	\$1.67	\$1.60
MAY	\$1.60	\$1.80	\$1.43	\$1.45
JUNE	\$1.50	\$1.65		\$1.47
JULY	\$1.47	\$1.65		\$1.45
AUGUST	\$1.33	\$1.50	\$1.50	\$1.35
SEPTEMBER	\$1.47	\$1.50	\$1.50	\$1.35
OCTOBER	\$1.35	\$1.45		\$1.40
NOVEMBER	\$1.45	\$1.57		
DECEMBER	\$1.40	\$1.50	\$1.35	\$1.40
1994				
JANUARY	\$1.75	\$1.75	\$1.30	
FEBRUARY		\$1.55	\$1.30	\$1.30
MARCH	\$1.65	\$1.70		
APRIL	\$1.50	\$1.60		\$1.37
MAY	\$1.30	\$1.40		\$1.30
JUNE	\$1.40	\$1.35	\$1.35	\$1.40
JULY	\$1.70	\$1.60	\$1.35	\$1.40
AUGUST	\$1.50	\$1.60		\$1.50
SEPTEMBER	\$1.60	\$1.50		\$1.50
OCTOBER	\$1.40	\$1.35		
NOVEMBER	\$1.40	\$1.35	\$1.15	\$1.50

Table A.1. continued

	TORONTO BOARDING	FLOOR BOARD	WHEEL BOARD	CHIEF BOARD
INTERMEDIATE	94.75	94.80	95.00	9.00
END				
JANUARY	95.00	95.00	95.00	
FEBRUARY	95.00	95.00	95.00	9.00
MARCH	95.00	95.00	95.00	9.00
APRIL	95.00	95.00	95.00	9.00
MAY		95.00	95.00	9.00
JUNE	95.00	95.00		9.00
JULY	95.00	95.00	95.00	9.00
AUGUST	95.00	95.00		9.00
SEPTEMBER	95.00	95.00		9.00
OCTOBER		95.00		9.00
NOVEMBER	95.00	95.00		9.00
DECEMBER	95.00	95.00	95.00	9.00
END				
JANUARY	95.00	95.00		9.00
FEBRUARY	95.00	95.00	95.00	
MARCH		95.00	95.00	9.00
APRIL		95.00		9.00
MAY	95.00	95.00		9.00
JUNE	95.00	95.00		9.00
JULY	95.00	95.00		9.00
AUGUST	95.00	95.00		9.00
SEPTEMBER	95.00	95.00		9.00
OCTOBER	95.00	95.00		
NOVEMBER	95.00	95.00		

Table A-4-continued

	TURKISH SCHEMEL	FLORIN SCHEMEL	POUNT SCHEMEL	CHET SCHEMEL
DECEMBER	\$4.87	\$16.80		\$1.88
1999				
JANUARY		\$17.80		
FEBRUARY	\$5.18	\$18.80		
MARCH	\$5.89	\$19.80		
APRIL		\$19.10		\$1.88
MAY	\$5.99	\$19.10		\$1.88
JUNE	\$5.94	\$19.10		\$1.88
JULY	\$5.48	\$19.80		\$1.88
AUGUST	\$4.80	\$17.10		\$1.88
SEPTEMBER	\$4.00	\$17.10		\$1.88
OCTOBER	\$4.00	\$17.10		\$1.88
NOVEMBER	\$4.80	\$17.10		\$1.88
DECEMBER	\$4.80	\$17.10		\$1.88
1999				
JANUARY		\$17.10		

Sharon

1778. *Shary Paper Letterbook*. July 20-1777-December 5. 1778. *Alderman Library*. University of Virginia, Charlottesville. Virginia. (December 1778). January 27 (barren, flax, wheat), April 2 (barren), May 12 (barren), June 15 (barren), July 13 (barren), August 24 (barren), September 29 (barren), November 2 (barren), December 12 (barren, flax, wheat).

1779. *Paper Letterbook, LVA*. February 4 (barren), April 27 (barren), May 15 (barren), July 1 (barren), August 3 (barren), October 22 (barren, flax, wheat), November 27 (flax, wheat), December 16, 21 (barren, flax, wheat).

1779. *Paper Letterbook, LVA*. February 29 (flax, wheat), May 29 (barren), June 15 (barren), July 20 (barren, wheat), August 4 (barren), September 12 (barren), October 12 (barren), November 4 (barren), December 15 (barren).

1779. *Lower Morton, Robert Carter of Nomina Hall: A Virginia Tobacco Planter of the Eighteenth Century* (Williamsburg, VA: Colonial Williamsburg, 1943). 145. January (wheat), *Paper Letterbook, LVA*. February 29 (barren), April 12 (barren), May 29 (barren), June 22 (barren), July 1 (barren), August 20 (barren), September 5 (barren), October 24 (barren, flax, wheat), November 2 (barren).

1774. John C. Fitzpatrick ed. *The Writings of George Washington from the Original Manuscript Sources, 1745-1799*. 39 Volumes (Washington: Government Printing Office, 1961-1964). 3: 156. February (flax, wheat), *Paper Letterbook, UVA*. March 18 (barren, wheat), April 27 (barren, wheat), July 20 (barren), August 3 (barren), September 14 (barren), October 26-27 (barren, wheat), November 11 (barren, wheat), December 26 (barren), *Morton, Robert Carter*, 145. September (barren).

1775. Thomas Milton Frazier, "Eighteenth Century Alexandria Virginia, Before the Revolution, 1740-1775," Ph.D. Dissertation, College of William and Mary, 1977. Tables 5-15: 255-155. January-December (flax, corn), May-December (barren), *Paper Letterbook, UVA*. January 4 (barren), February 3, 5, 15 (barren, wheat), March 4 (barren), April 7 (barren, wheat), June 4 (barren), September 1 (barren), December 1 (barren), *Morton, Robert Carter*, 156. November (barren).

1780. Norman K. Risjord. *Chesapeake Politics, 1750-1800* (New York: Columbia University Press, 1972). 161-162. April-September (barren, wheat).

1784. *Morton, Robert Carter*, 171. January (barren), corn, *Risjord Chesapeake Politics*, 162-162. July-September (barren, wheat), *Virginia Journal and Alexandria Advertiser*, December 2, 5, 16, 22, 30 (barren, flax, wheat).

1785. *Virginia Journal and Alexandria Advertiser*, January 4, 15, 20, 27 (barren, flax, wheat), February 2, 10, 17, 24 (barren, flax, wheat).

corn) March 15-16-17 (Johnston River wheat corn) April 14, 21-22 (Johnston River wheat corn) May 11, 20 (Johnston River wheat corn) June 1, 20 (Johnston River wheat corn) July 22 (Johnston River wheat corn) August 4, 17, 20 (Johnston River wheat corn) September 15, 22 (Johnston River wheat corn) October 22, 20-27 (Johnston River wheat corn) November 2 (Johnston River wheat corn) December 1-8-22 (Johnston River wheat corn)

1796 *Virginia Journal and Alexandria Advertiser*, January 22, 18 (Johnston River wheat corn) March 2, 22, 20 (Johnston River wheat corn) April 6, 12, 20 (Johnston River wheat corn) June 1, 5 (Johnston River wheat corn) August 2 (Johnston River wheat corn) *Patriotick Freeman of Washington*, 28-425-29-107-118 May 12 (River) December 4 (wheat) December 20 (corn) *Revered Chesapeake Pilot*, 161-162 July, September (wheat), October-December (Johnston)

1797 *Revered Chesapeake Pilot*, 161-162 January-June (Johnston), January-March July (wheat) *Virginia Journal and Alexandria Advertiser*, March 22 (River) April 15-20 (River) May 1, 17-24 (River) June 7-14-21 (River) July 26-28 (River) August 22, 20 (Johnston River wheat corn) September 4-12 (Johnston River wheat corn) October 4, 11, 18-22 (Johnston River wheat corn) November 1-5, 15-22 (Johnston River wheat corn) December 12 (Johnston River wheat corn)

1798 *Morris Robert Carter*, 146 March (Johnston corn) *Patriotick Freeman of Washington*, 10-58-115 August 24 (River) October 10 (River) Robert A. Rutland ed. *The Papers of George Mason, 1786-1792*, 3 Volumes (Chapel Hill: University of North Carolina Press, 1970) 5-1130 December 18 (Johnston)

1799 *Patriotick Freeman of Washington*, 30-227 March 12, 1799 (River)

1799 *Shenandoah Virginia Gazette*, February 17 (wheat, corn), Rutland *Papers of Mason*, 3-1259 May 20 (Johnston) "The Leaven Family Correspondence," *The John P. Bunch Historical Papers of Randolph-Macon College*, 1 June 1804, 1805, 225, 226 January 28-1797 ironstone wheat prices from October 1798 November 21 (Johnston) *Patriotick Freeman of Washington*, 52-168-180 December (Johnston wheat corn)

1791 "Pencil Correspondence," 229 January 20 (Johnston wheat) Rutland *Papers of Mason*, 3-1254, 1256, 1258 July 12 (Johnston) August 17 (Johnston) September 4 (Johnston)

1798 Edwin Morris Beale ed. *Thomas Jefferson's Farmbook, With Correspondence and Belonging Records from Oakes Springs (Charlottesville: University Press of Virginia, originally published, Princeton, NJ, 1922)*, 214 March 15 (Johnston Richmond) *Calendar of Virginia State Papers, and Other Manuscripts*, 11 Volumes (Richmond, 1974-1982) 6-245 January 5-1790 (spring Johnston prices in December) *George Washington Papers: Library of*

Congress Washington D.C. (hereafter LC) January 1793 (wheat, corn prices for December), January 8 1793 (flow prices for December)

1793 *Calendar of Virginia State Papers* 6 167 January 8 1793 (wheat) Washington Papers LC January (wheat, corn) Harry Truman, *The Western Country in 1793: Reports on Kentucky and Virginia*, Mowen Tending and Godfrey Davis, eds. (San Marcos, CA: Henry R. Huntington Library, 1948) 45 58 January-April (flow), February-April (wheat, corn, Winchester) *Prospectus, History of Washington* 24 40 May 19 (wheat) Washington Papers, LC May 12 (flow, wheat, corn), May 23 (flow), May 31 (flow)

1794 *Prospectus: History of Washington*, 39 104 14 48 May 21 (flow), December 21 (wheat) Washington Papers LC June 4 (flow)

1795 *Republican Journal*, and *Danvers Advertiser*, June 12 18 (wheat, wheat, corn) July 3 (wheat, wheat, corn) October 2 (wheat) *Columbian Guardian & Berkeley Advertiser*, September 5 (August price of wheat) Washington Papers LC December 20 (wheat and flow)

1796 Washington Papers LC January 17 (flow) April 17 (flow) *Columbian Mirror and Alexandria Gazette*, February 3 (flow), March 5 12 26 28 (flow), April 3 5 16 20 (flow), May 7 11 (flow), June 4, 11 16 25 (flow), August 6 13 (flow), September 13 (flow), November 22 26 (flow), December 30 (flow) *Republican Journal*, and *Danvers Advertiser*, July 21 (flow, wheat)

1797 *Columbian Mirror and Alexandria Gazette*, January 18 17 14 (flow), March 4 16 30 (flow), April 6 18 (flow) *Jefferson's Paraphrase* 205 January (wheat), *Richmond, Alexandria Advertiser*, April 13 (flow), May 25 (flow), June 1 (flow), July 1 (flow), August 12, 24 (flow), September 5 20 (flow), October 12 21 26 (flow), November 18 21 30 (flow), December 24, 25 (flow) *Columbian Guardian & Berkeley Advertiser*, April 27, 1797 (wheat), *Virginia Magazine of History and Biography*, 7 (October 1895) 184 September 7 (wheat)

1798 *Alexandria Advertiser*, January 4, 26 (flow), February 6, 13 22 (flow), March 1 9 17 17 (flow), April 7 25 (flow), May 3 (flow) *Columbian Mirror and Alexandria Gazette*, March 5 1798 (wheat, corn), April 14 (wheat, wheat, corn), May 5 12 18 (wheat, wheat, corn), June 16 (wheat, wheat, corn), October 17 (wheat, wheat, corn) *Alexandria Advertiser and District of Columbia Daily Advertiser*, May 24 (flow), June 6 15 22 (flow), July 4 14 21 27 (flow), August 4 18 21 (flow), September 7 18 20 (flow), October 14 20 22 (flow), November 5 21 23 (flow), December 1 9 21, 11 (flow)

1799 French Spokeness (Oman, Alexandria, Virginia, Oakland) *Foreign Monthly* 1797, 1798-1800, Bureau of the Customs, Record Group 36 (National Archives, Washington D.C. (hereafter NA) March (flow), April (corn), July (corn), August (wheat, corn), September (wheat, corn), November (wheat), December (wheat, corn) *Types, and Details of*

*Columbian Daily Advertiser*, April 18 (flow), May 1, 12, 18 (flow), June 4  
 12, 13 (flow), July 3, 12 (flow), August 3, 28 (flow), September 3, 13, 19  
 (flow), October 4, 12, 21 (flow), November 5, 20, 28 (flow), December 7, 14  
 23 (flow). *Columbian Merchant and Alexandria Gazette*, August 10 ( tobacco,  
 wheat, corn prices for July 29 and August 29). "Foreign Correspondence,"  
 228. December 25 (flow).

1850. *Times*, and *District of Columbia Daily Advertiser*, January 2,  
 22 (flow), February 12, 28 (flow), March 14, 23, 29 (flow), April 3, 25  
 (flow), 19 (reheat, Richmond), June 5, 12 (flow), July 16 (reheat, Richmond),  
 September 25 (flow), October 11, 21 (flow), November 21 (flow), December  
 24 (reheat, Richmond). *French Spedition China, Alexandria, Virginia*.  
*Outward Foreign Manifests*, 1757-1760, 1800. *Bureau of Customs Record*.  
 Group 26. NA. March ( tobacco, corn), April ( tobacco, corn), May (flow,  
 corn), June ( tobacco, corn), July ( tobacco, flow, corn), August ( tobacco, flow,  
 corn), September (corn), October ( tobacco, corn), November ( tobacco, corn),  
 December ( tobacco, corn). Joseph Radcliffe and Company, Alexandria City.  
*Letterbook*, 1800-1802, 1804. Library of Virginia, Richmond, Virginia.  
 (November LOV). December (F) (flow).

1801. *Alexandria Advertiser and Commercial Intelligence*, January  
 20, 27, 24, 31 ( tobacco, flow, corn), *Radcliffe Letterbook*, LOV. January (F)  
 ( tobacco, flow, wheat), April 18 ( tobacco), May 1 ( tobacco), June 28 (flow),  
 July 25 ( tobacco), August 18, 27 ( tobacco, wheat, corn), September 15, 18, 26  
 (wheat, corn), November (F) ( tobacco), December 1, 8 (flow), *Alexandria*  
*Voyage*. *Outward Foreign Manifests*, 1804-1805. *Bureau of the Customs*  
*Record Group 26*, NA. February ( tobacco, flow, corn), March (corn), April  
 (wheat, corn), May (wheat, corn), June ( tobacco, corn), July (corn),  
 September ( tobacco), October ( tobacco, corn), December ( tobacco, wheat,  
 corn). *Times*, and *District of Columbia Daily Advertiser*, March 2, 14 (flow),  
 April 3, 14, 30 (flow), May 10 (flow), June 2 (flow), July 16 (flow), August  
 14, 22 (flow), September 14, 26 (flow), October 3, 25 (flow), November 12,  
 20 (flow).

1802. *Times*, and *District of Columbia Daily Advertiser*, January 4,  
 16 (flow), February 12 (flow), March 4, 18, 25 (flow), April 2 (flow), May 4,  
 14, 29 (flow), June 18, 24 (flow), July 10, 18, 25 (flow), *Alexandria*  
*Voyage*. *Outward Foreign Manifests*, 1804-1805. *Bureau of the Customs*  
*Record Group 26*, NA. January ( tobacco, wheat), February (corn), March  
 ( tobacco), April ( tobacco, corn), June (wheat), August ( tobacco, corn),  
 September ( tobacco, corn), October ( tobacco), November ( tobacco, wheat,  
 corn), December ( tobacco, flow, wheat, corn). *Radcliffe Letterbook*, LOV.  
 February 2 ( tobacco), May 2, 6, 14 ( tobacco, corn), June 1, 2 ( tobacco), July  
 11, 24 (F) ( tobacco, wheat, corn), September 2 (flow), *Columbian Advertiser*,  
 and *Commercial, Mechanical, and Agricultural Gazette*, August 11, 18  
 (flow), September 22 (flow), October 6, 27 (flow), November 12 (flow).

1803 *Alexandria Virginia Overseas Foreign Mails*: 1801-1803, Bureau of the Customs Record Group 36 NA. January (bacco, flour wheat), February (bacco, wheat, corn), March (bacco, wheat, corn), April (bacco, wheat, corn), May (bacco, corn), June (bacco, corn), July (bacco, wheat, corn), August (bacco, flour, corn), September (bacco, flour, corn), October (flour, corn), November (bacco, flour, corn), December (bacco, flour, wheat, corn), *Alexandria Register*: February 18 (flour), March 11 (flour), April 18 (flour), May 13 (flour), June 1 (flour), July 1 (flour).

1804 *Alexandria Virginia Overseas Foreign Mails*: 1801-1803, Bureau of the Customs Record Group 36, NA. January (bacco, flour, corn), February (bacco, flour, wheat), March (flour, wheat, corn), April (corn), May (bacco, corn), June (bacco, corn), July (bacco, corn), August (bacco, corn), September (bacco, corn), October (bacco), November (bacco), December (bacco, corn), *Alexandria Daily Advertiser*: April 8-10 (flour), May 8-12, 24 (flour), June 28 (flour), July 7-17-18 (flour), August 11, 27 (flour), September 8-17-27 (flour), October 28-29 (flour), November 28, 30 (flour), December 18, 28 (flour).

1805 *Alexandria Daily Advertiser*: January 8-21 (flour), February 2 (flour), July 8-27 (flour), September 27 (flour), October 5, 26 (flour), November 28 (flour), December 6-12 (flour), *Alexandria Virginia Overseas Foreign Mails*: 1804-1805 Bureau of the Customs Record Group 36 NA. February (bacco), March (bacco, flour), April (corn), May (bacco, corn), June (bacco, corn), July (bacco, corn), August (bacco, corn), September (corn), October (bacco, corn), November (bacco, corn), December (bacco, corn), *Alexandria Register*: April 5, 18-26 (flour), May 5, 27, 34 (flour), June 11-24 (flour), July 13-18 (flour), August 7 (flour).

1806 *Alexandria Daily Advertiser*: January 8-18 (flour).

*Currency Conversion Rates*: John A. McDougal, "How Much Is That in Real Money? A Historical Price Index for Use as a Deflator of Money Values in the Economy of the United States 1600-1960" *American Antiquarian Society*, 1963, 314-333.

APPENDIX 1  
STOCK TRANSACTIONS  
OF ORIGINAL POTOMAC COMPANY INVESTORS

The following table is a list of 155 individuals who initially invested in the Potomac Company, and their share transactions in subsequent years. The investors listed here account for 853 of the 945 shares initially sold to private individuals (the states of Virginia and Maryland purchased another 150 shares). The company made no official record of persons who purchased shares, and a complete list of stock transfers was not started until 1791. However, when original investors sold their stocks after 1791 their transactions (and eventual ownership of stock) entered the company's records. In addition, the list of investors present at each of the yearly general meetings of the company identified many shareholders. The letters and correspondence of the officers of the company also helped identify a number of investors, as did the company's account of motions conducted in the mid-1790s to sell the stock of delinquent shareholders (see *Source*).

My concentration on northern Virginia has necessarily led to more complete information about the Virginia investors. Nonetheless, the large number of Maryland shareholders (nearly one in fifty overall) the board support the project, led in both states. In particular, the table makes clear

the significant role played by Georgetown merchants. Where information was readily available about Maryland investors I have included it, but I made no attempt to provide systematic information about their ownership or occupations. The brevity of the narrative is that provided in the record of the share transfer or census records.

Determining occupations was tricky, in light of the fact that many investors were a matter of occupational fate. Where possible, I have identified each investor by what appears to be their primary source of income. I have relied on a wide reading of the local newspapers, private papers and secondary sources to make these determinations.

Finally, though merchants used Virginia and Maryland currencies, pounds sterling and dollars interchangeably in their transactions, I have converted all share prices into dollars at the following rates: £1 sterling equals \$4.84, £1 Virginia currency equals \$2.22, and £1 Maryland currency equals \$2.47 (see Sources). The Potomac Company shares were originally valued at £100 sterling or \$484.84.



1000

[illegible]



100

[illegible]

Table A-2—continued

State	DOC program	Modifications	Reagents	DOC/DOC/DOC Running name	DOC/DOC/DOC End date	# of samples	DOC/DOC/DOC End date
California, California				DOC/DOC/DOC 1994, Dec 18	1994, May 17	1	1994, May 17
						1	1994, May 17
				DOC/DOC/DOC 1994, April 1		1	1994, May 17
				DOC/DOC/DOC 1994, July 9		1	1994, May 17
					1994, Sept 18	1	1994, May 17
					1994, Sept 18	1	1994, May 17
				DOC/DOC/DOC 1994, July 18		1	1994, May 17
				DOC/DOC/DOC 1994, Dec 18		1	1994, May 17
				DOC/DOC/DOC 1994, Oct 17		1	1994, May 17
					1994, Apr 18	1	1994, May 17
					1994, April 18	1	1994, May 17
					1994, Sept 18	1	1994, May 17
				DOC/DOC/DOC 1994, Sept 14		1	1994, May 17
				DOC/DOC/DOC 1994, Sept 14		1	1994, May 17
				DOC/DOC/DOC 1994, Apr 18		1	1994, May 17
				DOC/DOC/DOC 1994, Apr 18		1	1994, May 17
				DOC/DOC/DOC 1994, Sept 18		1	1994, May 17
				DOC/DOC/DOC 1994, Sept 18		1	1994, May 17
				DOC/DOC/DOC 1994, Sept 18		1	1994, May 17
				DOC/DOC/DOC 1994, Sept 18		1	1994, May 17
					1994, Apr 18	1	1994, May 17
					1994, May 17	1	1994, May 17

1

[illegible]





Table A.2-continued

State	Occupation	Industry	Quarters	Sample-leave period (Q1-Q4)	Start year (Q1)	Stop year (Q4)
Alaska, Texas		Foodstuffs, etc. Mfg.		1974		1974
					1978, May 78	1981, 78
Arkansas, Colorado	Plantation/forestry	Foodstuffs, etc. Mfg.	17	1970		1970
				1973, April 73		1974, 73
California, Florida	Foreman	Chemical/chemical	4	1970	1970, July 71	1970, 77
					1970, Dec 77	1971, 71
Colorado, Florida	Printer	Printing Co.	unknown	1970		unknown
					1971, Feb. 70	1971, 71
Colorado, Illinois	Foreman	Chemical	8	1970		1970, 71
					1970, July 70	1970, 70
Colorado, Texas	Printer	Printing Co.	10	1970		1971, 71
					1971, June 71	1971, 71
Delaware, Michigan	Industrial/chemical	Chemical/chemical	10	1970		1970, 70
					1970, Aug 70	1971, 71
Idaho, Oregon	Printer	Printing Co.	8	1971		1971, 71
					1970, May 70	1971, 71
Illinois, South	Foreman	Chemical	17	1970		1970, 70
					1970, May 70	1971, 71
King Island (Tasmania)	Miner	Mineral	10	1971		1971, 71

Table A-2 (continued)

State	Construction	Construction	Months	Survey Year Publication	Survey Year Release	Year Completed	Survey Year Release
New Mexico (National)				1995 July 1		1	1996 12
					1994 August 1	1	1995 10
North Carol	Plaster	Leach Co.	8	1984	1983 April 30	1	1984
North Carol	Plaster	Reid Co.	10	1984	1984 April 30	1	1985 05
North Dakota	Shingles	Shawmut	11	1984		1	1984 10
				1984		1	1984 10
					1984 Dec 8	1	1984 10 releasing 1985
North Dakota	Shingles/Plaster	Leach Co.	8	1984	1984 July 8	1	1984 10
						1	1984 10
North Dakota	Plaster	Charles Co. SD		1984	1984 Dec 3	1	1985 01
North Dakota		Shawmut		1984		1	1985 04
North Dakota	Plaster	Paulsen Co. SD		1984		1	1984 10
North Dakota	Plaster	Paulsen Co. SD		1984		1	1984 10
North Dakota	Plaster	Paulsen Co. SD		1984	1984 May 8	1	1984 10
North Dakota	Plaster	Paulsen Co. SD		1984		1	1984 10
North Dakota	Shingles	Shawmut	8	1984	1984 April 10	1	1984 10

Table A-2. continued

State	Organization	Address	Refugees	Refugee Resettlement Program	Refugee Resettlement Program	Refugee Resettlement Program	Refugee Resettlement Program
Arkansas	Arkansas Refugee Council	Little Rock, Ark.	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
California	California Refugee Council	San Francisco	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Colorado	Colorado Refugee Council	Denver	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Connecticut	Connecticut Refugee Council	Hartford	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Delaware	Delaware Refugee Council	Dover	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
District of Columbia	District of Columbia Refugee Council	Washington, D.C.	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Florida	Florida Refugee Council	Tallahassee	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Georgia	Georgia Refugee Council	Atlanta	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Hawaii	Hawaii Refugee Council	Honolulu	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Idaho	Idaho Refugee Council	Boise	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Illinois	Illinois Refugee Council	Chicago	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Indiana	Indiana Refugee Council	Indianapolis	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Iowa	Iowa Refugee Council	Des Moines	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Kansas	Kansas Refugee Council	Topeka	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Kentucky	Kentucky Refugee Council	Louisville	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Louisiana	Louisiana Refugee Council	New Orleans	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Maine	Maine Refugee Council	Portland	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Maryland	Maryland Refugee Council	Baltimore	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Massachusetts	Massachusetts Refugee Council	Boston	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Michigan	Michigan Refugee Council	Lansing	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Minnesota	Minnesota Refugee Council	Minneapolis	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Mississippi	Mississippi Refugee Council	Jackson	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Missouri	Missouri Refugee Council	St. Louis	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Montana	Montana Refugee Council	Billings	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Nebraska	Nebraska Refugee Council	Omaha	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Nevada	Nevada Refugee Council	Reno	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
New Hampshire	New Hampshire Refugee Council	Manchester	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
New Jersey	New Jersey Refugee Council	Newark	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
New Mexico	New Mexico Refugee Council	Albuquerque	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
New York	New York Refugee Council	New York City	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
North Carolina	North Carolina Refugee Council	Raleigh	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
North Dakota	North Dakota Refugee Council	Bismarck	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Ohio	Ohio Refugee Council	Columbus	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Oklahoma	Oklahoma Refugee Council	Oklahoma City	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Oregon	Oregon Refugee Council	Portland	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Pennsylvania	Pennsylvania Refugee Council	Philadelphia	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Rhode Island	Rhode Island Refugee Council	Providence	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
South Carolina	South Carolina Refugee Council	Columbia	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
South Dakota	South Dakota Refugee Council	Spearhead	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Tennessee	Tennessee Refugee Council	Memphis	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Texas	Texas Refugee Council	Houston	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Utah	Utah Refugee Council	Salt Lake City	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Vermont	Vermont Refugee Council	Montpelier	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Virginia	Virginia Refugee Council	Richmond	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Washington	Washington Refugee Council	Seattle	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
West Virginia	West Virginia Refugee Council	Charleston	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Wisconsin	Wisconsin Refugee Council	Madison	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982
Wyoming	Wyoming Refugee Council	Cheyenne	10	1980	1980, 1981, 1982	1980, 1981, 1982	1980, 1981, 1982

Table A.3. (continued)

NAME	DOOR/DOORSET	MANUFACTURER	SLATS	DATE SLATS RECEIVED	DATE SLATS INSTALLED	# OF SLATS	DATE PDS INSTALLED
John, Richard							
Joe, Richard (Pony)	Pony	Worcestershire Co.	0	1978	1978, May 15	1	1978-12
Joe, Thomas (Don)	Pony	Worcestershire Co.	0	1978		1	1978-12
Joe, Thomas (Don)	Pony	Worcestershire Co.	0	1978	1978, Feb. 20	1	1978-12
Joe, Thomas (Don)	Pony	Worcestershire Co.	0	1978	1978, March 5	1	1978-12
John, Thomas	Exponet	London Co.	0	1978		1	1978-12
John, Tony	Exponet	London Co.	0	1978		0	1978-12
John, Susan	Blackhead-Bridle	Compton		1978	1978, Feb. 20	1	1978-12
John, Charles	Agnew-Bell	Park Co.	0	1978	1978, Feb. 20	1	1978-12
John, William	Meridan	London Co.	1	1978	1978, Aug. 10	1	1978-12
John, Bruce	Worcestershire Meridan	London Co.	0	1978	1978, March 10	0	1978-12
John, William	Meridan	London Co.	0	1978	1978, Dec. 20	1	1978-12
John, William	Meridan	London Co.	0	1978	1978, Dec. 20	1	1978-12



Table A.2. continued.

Name	Coordinates	Accession	Months	Start/End Publication	Start/End Survey	# of Images	Survey Area (deg <sup>2</sup> )
Bohannon, John (and D. Bohannon)		Albuquerque	8	1964		1	50000
					1969, April 14	1	50000
					1969, Aug. 26	1	50000
Brady, J. Joseph		Rockledge, Fla.	8	1964		1	50000
					1969, Feb. 14	1	50000
Brayton, Robert		Marlborough, Mass.		1964		2	50000
					1969, May 10	1	50000
Brink, Bruce		St. Mary's, Fla.		1964		1	50000
					1969, Sept. 20	1	50000
Brink, Robert		Marlborough		1964		1	50000
					1969, March 20	1	50000
Brown, John		Champaign		1964		1	50000
Brus, William		Franklin, Mass.		1964		1	50000
					1969, April 19	1	50000
Bryce, Albert		Marlborough, Pa.	10	1964		1	50000
					1969, Aug. 7	1	50000
Bryce, Frederick		Marlborough, Pa.	with others	1964		1	50000
					1969, March 13	1	50000
Brydson, Philip G.		Rockledge, Fla.	10	1964		1	50000

Table A.8 (continued)

name	entry number	reference	status	entry number cross-referenced	entry number linked	top member	first pub. year
Pavlov, Dmitry I.				1993, Oct. 1		1	1993
	Marchuk	Experiments		1996		1	1996
				1997, May 22		1	1997
Pavlov, V. V.				1996	1996, Aug. 16	1	1996
					1996, Aug. 16	1	1996
					1996, Aug. 16	1	1996
					1997, Aug. 16	1	1997
					1997, Nov. 16	1	1997
Pavlov, Ivanovich	Marchuk	Experiments	1	1994		1	1994
					1996, Aug. 16	1	1996
						1	1997
Pavlov, Kirill	Plasmachronium	Lectures, 16	16	1994		1	1994
Pavlov, Petr V.	Marchuk-Pavlov	Experiments	1	1991		1	1991
					1993, Dec. 1	1	1993
Pavlov, Sergey	Marchuk	Experiments		1994		1	1994
Pavlov, Vladimir					1997, Aug. 1	1	1997
						1	1998
					1998, Dec. 16	1	1998
Pavlov, Vladimir	Marchuk-Pavlov	Experiments		1994		1	1994
Pavlov, Vladimir				1997, Feb. 28		1	1997
						1	1998
					1998, Dec. 16	1	1998
Pavlov, Victor				1994		1	1994





Table A.1 (continued)

name	occupation	business	status	last known employment	last known status	year employed	year last employed
Smith, Edward							
Smith, Francis B.		Frederick Co. MI		1900		1	1911-12
Smoot, William Elmer	Physician	East Company Co.	MS	1900		0	1900-01
Snodgrass, William	Merchant/Doctor	Chapman		1900		0	1900-01
				1900, Oct. 20		1	1900-01
				1900, May 11		1	1900-01
				1900, May 10		1	1900-01
					1900, Aug. 1	1	1900
					1900, Dec. 25	1	1900
Smith, John Benjamin	Farmer	Anthony		1900		1	1900-01
				1900, Dec. 26		1	1900-01
				1900, Aug. 17		1	1900
				1900, Dec. 1		1	1900-01
				1900, Dec. 1		1	1900
Smith, Richard Franklin		Franklin Co. MO		1900	1900, May 14	0	1900
						0	1900-01
					1900, June 17	1	1900
					1900, Dec. 1	1	1900-01
Smith, Thomas	Agent/Physician	Franklin Co. MO		1900		1	1900-01



Table A.3. *continued*

State	Organization	Identification	Released	RAPIC release information	DATE RELEASED	U.S. AIR FORCE	POST-RAPIC RELEASE
Washington State				1976, March 23	1976, March 23	1	1976
					1976, March 23	3	1976
					1976, June 20	7	1976
Wisconsin, John A.		St. Mary's Co. 1975		1976		3	1974-75
Wisconsin, Philip		Endicott House 1975		1976	1974, July 14	7	1974-76
						1	1974-75
					1974, March 1	1	1974-75
Wisconsin, Joseph	Archdiocese of Milwaukee	Archdiocese	3	1976		1	1974-76
Wisconsin, Thomas	Franciscan Province	Franciscan Province	10	1976	1975, April 23	1	1974-76
					1976, Dec. 28	1	1974-76
Wisconsin, Charles Bryan	Protestant	Endicott Co.	21	1976		3	1974-76
					1974, August 28	2	1974
Wisconsin, Robert	Methodist	Georgetown		1976		1	1974-75
					1976, July 28	1	1974-76
				1976, July 2		1	7
					1976, July 27	1	1976
Wisconsin, John	Protestant	Wisconsin of Co.	20	1976		2	1974-75
					1975, Dec. 1	2	1974-76
Washington, Joseph	Protestant	Anglican Co.	100	1976		1	1974-76

Table A-3-continued

State	Current year	Previous year	Ratio	Ratio (1990-2000)	Ratio (2000-2010)	Ratio (2010-2020)
Alabama	1990	1991	1.00	1.00	1.00	1.00
Alaska	1990	1991	1.00	1.00	1.00	1.00
Arizona	1990	1991	1.00	1.00	1.00	1.00
Arkansas	1990	1991	1.00	1.00	1.00	1.00
California	1990	1991	1.00	1.00	1.00	1.00
Colorado	1990	1991	1.00	1.00	1.00	1.00
Connecticut	1990	1991	1.00	1.00	1.00	1.00
Delaware	1990	1991	1.00	1.00	1.00	1.00
District of Columbia	1990	1991	1.00	1.00	1.00	1.00
Florida	1990	1991	1.00	1.00	1.00	1.00
Georgia	1990	1991	1.00	1.00	1.00	1.00
Hawaii	1990	1991	1.00	1.00	1.00	1.00
Idaho	1990	1991	1.00	1.00	1.00	1.00
Illinois	1990	1991	1.00	1.00	1.00	1.00
Indiana	1990	1991	1.00	1.00	1.00	1.00
Iowa	1990	1991	1.00	1.00	1.00	1.00
Kansas	1990	1991	1.00	1.00	1.00	1.00
Kentucky	1990	1991	1.00	1.00	1.00	1.00
Louisiana	1990	1991	1.00	1.00	1.00	1.00
Maine	1990	1991	1.00	1.00	1.00	1.00
Maryland	1990	1991	1.00	1.00	1.00	1.00
Massachusetts	1990	1991	1.00	1.00	1.00	1.00
Michigan	1990	1991	1.00	1.00	1.00	1.00
Minnesota	1990	1991	1.00	1.00	1.00	1.00
Mississippi	1990	1991	1.00	1.00	1.00	1.00
Missouri	1990	1991	1.00	1.00	1.00	1.00
Montana	1990	1991	1.00	1.00	1.00	1.00
Nebraska	1990	1991	1.00	1.00	1.00	1.00
Nevada	1990	1991	1.00	1.00	1.00	1.00
New Hampshire	1990	1991	1.00	1.00	1.00	1.00
New Jersey	1990	1991	1.00	1.00	1.00	1.00
New Mexico	1990	1991	1.00	1.00	1.00	1.00
New York	1990	1991	1.00	1.00	1.00	1.00
North Carolina	1990	1991	1.00	1.00	1.00	1.00
North Dakota	1990	1991	1.00	1.00	1.00	1.00
Ohio	1990	1991	1.00	1.00	1.00	1.00
Oklahoma	1990	1991	1.00	1.00	1.00	1.00
Oregon	1990	1991	1.00	1.00	1.00	1.00
Pennsylvania	1990	1991	1.00	1.00	1.00	1.00
Rhode Island	1990	1991	1.00	1.00	1.00	1.00
South Carolina	1990	1991	1.00	1.00	1.00	1.00
South Dakota	1990	1991	1.00	1.00	1.00	1.00
Tennessee	1990	1991	1.00	1.00	1.00	1.00
Texas	1990	1991	1.00	1.00	1.00	1.00
Utah	1990	1991	1.00	1.00	1.00	1.00
Vermont	1990	1991	1.00	1.00	1.00	1.00
Virginia	1990	1991	1.00	1.00	1.00	1.00
Washington	1990	1991	1.00	1.00	1.00	1.00
West Virginia	1990	1991	1.00	1.00	1.00	1.00
Wisconsin	1990	1991	1.00	1.00	1.00	1.00
Wyoming	1990	1991	1.00	1.00	1.00	1.00





### Source

Identification of stockholders: value of shares and residence: Records of the Potomac Company, Ledger Book, 1766-1796; Proceedings, 1766-1805; Correspondence and Reports, 1765-1815; and Records Concerning Transfers of Shares of Stock, 1794-1848; all in National Parks Service, Round Group 75, National Archives, Washington, D.C. Slave ownership and residence: Mark Schretter Yantis and Florence Spinkman Love eds. *The 1782 Census of Yantis.....* 3 Volumes (Springfield, VA: Genealogical Books in Print, 1987). Additional information on Alexandria and Fairfax County inventory was found in: T. Michael Miles, *Artisans and Merchants of Alexandria, Virginia, 1780-1820* 2 Volumes (Hornie, MD: Heritage Books, 1994-1995). Currency conversion rates: John J. McCusker, *How Much is That in Real Money? A Historical Price Index for Use as a Deflator of Money Values in the Economy of the United States* (Worcester: American Antiquarian Society, 1992), 314, 332.

## BIBLIOGRAPHY

### Primary Sources

#### Manuscripts

College of William and Mary: East Great Green Library  
Williamsburg, Virginia

Diary of a n Unknown Schoolteacher and Miller, near Malheur, Frederick  
County, Virginia: 1798-1799

Library of Congress, Washington, D.C.

*Eliza Allen Records and General Correspondence*, 1793-1808

Thomas Jefferson Papers

John Lloyd Papers, 1798-1848

James Madison Papers

George Washington Papers

Library of Virginia, Richmond, Virginia

William Allison Papers: 1797-1799. William Allison Letter Book: 1790-  
1793. William and David Allison Letter Book: 1798-1799. William  
Allison Letter Book: 1799-1799

*Auditor of Public Accounts*, Entry 158: Public Roads: Orders and Vouchers

*Auditor of Public Accounts*, Entry 149: Internal Improvement: Expenditures.  
Memoranda: 1795-1799, 1804, 1804-1799, 1797-1800

*Auditor of Public Accounts*, Entry 160: Joint Stock Companies: Accounts  
and Correspondence, 1795-1799, 1799-1800

*Analysis of Public Accounts, Entry 302: Summaries of Acts, 1786-1814*

*Analysis of Public Accounts, Entry 304: Tobacco and Flour Inspectors.  
General Records: Alexandria, 1793-1803; Calhoun, 1774-1805,  
Dumfries, 1769-1774, and Falls of Potomac, 1793-1805.*

*Analysis of Public Accounts, Entry 305: Entry and Clearance, 1783-1785,  
District of South Potomac, Part of Alexandria: Entry and Clearance,  
1781-1786: District of South Potomac: Port of Alexandria: Entry and  
Clearance, 1788-1789: District of South Potomac and Port of  
Alexandria: Entry and Clearance, 1787: District of South Potomac:  
Port of Alexandria: Entry and Clearance (Goods and Duties), 1788-  
1789: District of South Potomac: Port of Alexandria: Entry and  
Clearance, 1784-1789: District of South Potomac: Port of Alexandria,  
Entry and Clearance, 1783-1784, 1786-1789: District of South  
Potomac, Port of Tycomore*

*Fairfax County, Virginia: Deed Books: A, E*

*George William Fairfax Letters, 1780-1782*

*William Hodgson Lottarbook, 1803-1807*

*Johnson Family Letters and Papers, 1775-1861*

*Henry Lee Papers, 1768-1816*

*Henry Lee Papers, 1784-1828*

*Legislative Petitions, Alexandria City, 1775-1805*

*Legislative Petitions: Berkeley County, 1776-1865*

*Legislative Petitions: Fairfax County, 1776-1865*

*Legislative Petitions: Frederick County, 1776-1865*

*Legislative Petitions: Jefferson County, 1868-1869*

*Legislative Petitions, Loudoun County, 1776-1806*

*Legislative Petitions, Massachusetts, 1783-1833*

*Legislative Petitions: Winchester Town, 1780-1865*

Little River Turnpike, Correspondence, Reports, etc., 1808-1814, 1817, 1820-1823

Little River Turnpike Company, Map

Little River Turnpike Company, Record Book, 1801-1812

London County, Virginia, Deed Books, B-Y

Reverend James Blair, Alexandria, Diary, 1805

Joseph Robble and Company, Alexandria City, Letterbook, 1808-1820, 1824

James Rumsey, Letters to Captain Charles Murray, 1781-1792

Olney Winter Letters, 1790-1793

The Reverend Gerhardt Van Rensselaer Miscellaneous Letters, 1784-1821

Washington Family Papers, 1782-1811

# National Archives, Washington, D.C.

Bureau of the Customs, Record Group 36, French Application Claims, Alexandria, Virginia, Outward Passage Manifests, 1797-1799-1800

Bureau of the Customs, Record Group 36, Alexandria, Virginia, Outward Foreign Manifests, 1801-1805

Bureau of the Customs, Record Group 36, Alexandria, Virginia, Letters Received, 1790-1820

National Parks Service, Record Group 79, Entry 150, Records of the Potomac Company, Letter Book, 1785-1786

National Parks Service, Record Group 79, Entry 150, Records of the Potomac Company, Proceedings, 1780-1807, 1809-1810, 1820-1823

National Parks Service, Record Group 79, Entry 150, Records of the Potomac Company, Correspondence and Reports, 1780-1812

National Parks Service, Record Group 79, Entry 150, Records of the Potomac Company, Records Concerning Transfers of Shares of Stock, 1791-1820

National Public Service, Second Group 79 Entry 179 Records of the  
Potomac Company. Miscellaneous Accounts 1765-1828.

University of Virginia, Alderman Library, Charlottesville, Virginia

"Mr. Jas. Ballou's Plan & Proposals Previous to the Passing Acts of the  
Assembly [1774]" Broadside, [1774]

"Mr. Jas. Ballou's Estimate of the Expenses of Opening ye Navigation  
of Potomack River [1714]" Broadside, [1714]

John Barrow Letters, 1795-1805

Barnell Milwood Scott Receipts

Parfax and Lee Papers 1552-1608

Brown and Harrison, Virginia Account Books 1730-1787

Arthur Lee Papers 1542-1552

Charles Lee Papers 1800 and n.d.

Edmund Jennings Lee Papers 1760-1821.

Richard Henry Lee Letters [1755-1784]

Lee Family Papers 1748-1818

Lee Family Papers as Scratched, 1658-1666.

Daniel H. Lewis Letters 1768-1788

James Madison Papers n.d.

John Mason Papers, 1738-1847

McKnight Family Papers 1788-1824

Miss Charles Betty Moore Papers 1716-1817

Julius O'Flaherty Papers, 1760-1827

Harry Pope Letterbook, July 28, 1787-December 5, 1792

*James Rumsey Letters, 1745-1786*

*Washington Family, Lee Family and William Cabell River Papers, ed.  
Virginia Historical Society, Richmond, Virginia*

*Henry Banks Papers, 1781-1817*

*How Family Papers, 1803-1808*

*William Giles Branch Papers, 1808-1828*

*Carlyle Family (of Scotland and Alexandria) Papers, 1708-1768*

*George Denton Papers, 1732-1842*

*David Griffith Papers, 1749-1789, 1803*

*Herbert Family Papers, 1793-1808*

*Isaac Hite (1758-1836) Correspondence Book, 1785-1842, 1895*

*Charles Lee Papers*

*Edmund Jennings Lee Papers, 1763-1808*

*Henry Lee Papers, 1783-1802*

*Richard Haniel Lee Papers, 1791-1808*

*Lee Family Papers, 1808-1827*

*Alexander MacGowan Papers, 1758-1814*

*Marine Insurance Company of Alexandria, Virginia, Insurance Policies, May  
18, 1807-November 9, 1816*

*Mason Family Papers, 1808-1819*

*John Mason Letterbook, 1812-1813*

*Robert Mason Papers, 1754-1808*

*Proclamation, Westmoreland County, Virginia, Papers, 1713-1805*

Pepton Family Papers, 1760-1818

Resolutions of the Managers of the Alexandria Lottery. Alexandria, Virginia.  
November 30, 1790

The Ramsayen Society, Shepherdstown, West Virginia Papers, 1783-1841

Shepherd Family Papers, 1750-1840

Brooker Randolph Wickham Papers, 1773-1807

### Exchanges and Magazines

#### Alexandria

*Alexandria Advertiser*, April 13, 1791-May 21, 1798

*Alexandria Advertiser and Commercial Intelligence*, December 2, 1800  
September 16, 1803

*Alexandria Advertiser and District of Columbia Daily Advertiser*, May 22,  
1798-January 1, 1799

*Alexandria Daily Advertiser*, September 18, 1800-May 8, 1808

*Alexandria Examiner*, November 28, 1803-April 6, 1807

*Columbia Advertiser and Commercial, Mechanical, and Agricultural  
Gazette*, August 2-November 29, 1803

*Columbia Mirror and Alexandria Gazette*, December 5, 1793-December 6,  
1808

*Times and District of Columbia Daily Advertiser*, April 17, 1799-July 26,  
1808

*Times, Gazette and Alexandria Advertiser*, September 3, 1798-September  
13, 1799

*Times Journal and Alexandria Advertiser*, February 3, 1794-May 21,  
1793

**Baltimore.**

Mitchell Journal and Baltimore Afrocentist, June 4, 1794 (November 11 1795)

**Dundee**

Republican Journal and Dundee's Advertiser, May 23 (October 3, 1795)

Republican Journal and Dundee's Weekly Advertiser, February 11–November 3, 1795.

Examiner, Gazette, and Agricultural Repository, September 18–November 25, 1795

**Leedsburg**

True American, December 26–1800

**Maryland/Georgetown.**

Impartial Observer, Or Georgetown News, Church & Town, and County Advertiser, September 18–October 11, 1797

Patent's Guardian & Berkeley Advertiser, June 27, 1794–December 28, 1797

**Philadelphia**

Columbian Magazine, December 1798–May 1799

Pennsylvania Gazette, November 13, 1798–December 30, 1798

**Washington**

National Intelligencer and Washington Advertiser, October 31–1800  
December 8, 1801

**Winchester**

Examiner, Gazette, and General, Or, the Winchester Political Repository, May 28, 1790–November 20, 1792

Examiner, Gazette, April 2, 1798–March 24, 1799

Virginia Gazette and Winchester Advertiser: August 18, 1791–November 26, 1791

Edinburg Virginia Gazette and Winchester Advertiser: April 3–September 18, 1792

#### Other

Condemners Magazine, February 1798 (London)

Virginia Gazette (Dixon), January 14, 1776 (Richmond)

#### Government Documents

##### United States

Account of the Description of Persons Within the United States of America, and the Territories Thereof, Accessible to...

Enumeration, Made, ... in ... 1830 3 Volumes. New York: Norman Ross Publishing, Inc. 1990, originally published: Washington, 1831.

American State Papers, Documents, Legislation, and Executive, of the Congress of the United States, Class A, Finance, 1789-1826 2

Volumes. Washington: Gale and Preston, 1833

American State Papers, Documents, Legislation, and Executive, of the Congress of the United States, Class A, Commerce and Navigation, 1789-1826 2 Volumes. Washington: Gale and Preston, 1833

American State Papers, Documents, Legislation, and Executive, of the Congress of the United States, Class 10, Indian Affairs, 1789-1826 4 Volumes. Washington: Gale and Preston, 1834

"Chesapeake and Ches Canal" House of Representatives Report 528 U.S. 19th Congress May 20, 1826

Corn Trade: A Statement of the Acts and Manifestations of the United States of America, for the Year 1849 New York: Norman Ross Publishing Inc. 1998 originally published Philadelphia 1850

The Debates and Proceedings in the Congress of the United States, ... 41 Volumes. Washington: Gale and Preston 1824-1828

Ford, Washington: Chester, ed. Journals of the Continental Congress, 1774-1789. 34 Volumes. Washington: Government Printing Office 1954-1971.

Gallatin, Albert. A Letter from the Secretary of the Treasury, Transmittin a Statement of the Amount of Disburs of the Public Money in the United States and Other Items. Washington: A. & O. Way, 1808

Heads of Families at the First Census of the United States Taken in the Year 1790. Records of the State Governments, 1782-1790. Virginia: Washington: Government Printing Office, 1904

"House of James Sumner." House of Representatives Report 304, U.S. 10th Congress. March 8, 1843

"House of James Sumner, Deceased." House of Representatives Report 650 U.S. 18th Congress. July 18, 1846

"James Sumner's Heirs, Ac." House of Representatives Report 265, U.S. 23th Congress. February 4, 1835

"James Sumner--Representative Of." House of Representatives Report 405 U.S. 23th Congress. March 4, 1835

"The Prisoners of the Mayor and Community of the Town of Alexandria Presented on the 14th Instant." House of Representatives Report. U.S. 7th Congress. January 21, 1800

Return of the Whole Number of Persons Within the Several Districts of the United States, According to . . . the Second Census . . . of the United States. Reprint Edition. New York: Norman Ross Publishing, Inc. 1850

Sumner's House Record. House of Representatives Report 189. U.S. 17th Congress. April 20, 1842

"The Several Memorials and Petitions of Citizens and Inhabitants of the County of Alexandria and the City of Washington." House of Representatives Report U.S. 9th Congress. January 21, 1806

The Statistics at Large of the United States of America, 1765-1845. 8 Volumes. Washington: Gale and Sexton, 1845-

The Statutes at Large of the United States of America.... 49 Volumes  
Washington, D.C.: Government Printing Office: 1480.

Thomas Harpington: James Rumsey—Hear. Of ' House of Representatives  
Report 317. U.S. 24th Congress: March 2 1837.

#### Virginia

Calendar of Virginia State Papers, and Other Manuscripts. 11 Volumes.  
Richmond, 1815-1858.

Hening, William Writton, ed. The Statutes at Large, Being a Collection of all  
the Laws of Virginia, from the ... Year 1619. 13 Volumes. Richmond,  
New York, and Philadelphia: 1809-1823.

Journal of the House of Delegates of the Commonwealth of Virginia....  
1784. Richmond: Thomas Nicholson and William Pearce: 1784.

Journal of the House of Delegates of the Commonwealth of Virginia....  
1788. Richmond: John Dixon, 1788.

Journal of the House of Delegates of the Commonwealth of Virginia....  
1792. Richmond: Augustine Davis: 1792.

Journal of the House of Delegates of the Commonwealth of Virginia....  
1800. Richmond: Marywerther Jones, 1801.

Journal of the House of Delegates of the Commonwealth of Virginia....  
1801. Richmond: Marywerther Jones, 1802.

Journal of the House of Delegates of the Commonwealth of Virginia....  
1802. Richmond: Marywerther Jones, 1803.

Journal of the House of Delegates of the Commonwealth of Virginia....  
1803. Richmond: Marywerther Jones, 1804.

Journal of the House of Delegates of the Commonwealth of Virginia....  
1804. Richmond: Samuel Pleasants: 1805.

Journal of the House of Delegates of the Commonwealth of Virginia....  
1805. Richmond: Samuel Pleasants: 1804.

Kennedy, John Frederick, ed. *Journals of the House of Burgesses of Virginia, 1773-1776, including the Minutes of the Committee of Correspondence*. Richmond, 1907.

Kennedy, John Frederick, ed. *Journals of the House of Burgesses of Virginia, 1776-1778*. Richmond, 1908.

"Legislative Privilege of the Merchants, Tradersmen, Farmers, and Other Citizens of the Commonwealth." Broadside [Richmond] 1790.

"Report of the Joint Commissioners on the Navigation of the Potomac River." *"House and Journal Documents, 1821-22"*. Richmond: Thomas Nelson, 1923.

Shepherd, Samuel, ed. *The Statutes at Large of Virginia, from . . . 1798 to . . . 1806*. 2 Volumes. New York: AMS Press, Inc., 1970 (originally published Richmond 1806).

### Published Documents

"An Act for Vesting in James Rumsey, Esquire, the Exclusive Right and Privilege of Making, Using, and Vending, Divers Engines, Machines and Devices, by Him Invented or Improved for a Term of Years Therein Mentioned." Broadside: Philadelphia 1789.

Ameling, John F. *Remarks on Manufactures, Particularly on the New Established Glass-Works, Near Frederick Town, in the State of Maryland*. [Fredericktown, MD] Matthew Hartig, 1787.

Anderson, Thomas. *Travels Through the Interior Parts of America*. 2 Volumes. New York: Arno Press, 1969 (originally published, London, 1781).

Anderson, James. *Essays Relating to Agriculture and Rural Affairs*. . . . Edinburgh: W. Creech [1774].

"It is a Meeting of the American Philosophical Society, May 2, 1888." Broadside: Philadelphia 1788.

"The Bank of the United States. Petitions of Virginia Cities and Towns for the Establishment of Branches." *Virginia Magazine of History and Biography* 8 (January 1902): 287-300.

Barnes, Joseph. *Remarks on Mr. Pacht's Reply to Mr. James Buchanan*.  
Dunstable: Philadelphia: Joseph Jones, 1744.

Barnes, Joseph. *"As John Pacht has Presented a Number of Handbills"*  
Dunstable: Philadelphia, 1749.

Barnes, Joseph. *Treatise on the Justice, Policy, and Utility of Establishing  
an Editorial System, for Promoting the Progress of the Useful Arts*.  
Philadelphia: Francis Baile, 1788.

Bayard, Ferdinand M. *Travels of a Frenchman in Maryland and Virginia  
in 1784*. . . Ben C. McDary trans and ed. Ann Arbor, MI:  
Edwards Brothers, Inc., 1958, originally published, 1797.

Beveridge, John. *Extractions of America, 1791-1811*. Lawrence Hutton and  
Gerrard Matthews, eds. New York: Harper and Brothers, 1897.

Betta, Edwin Morris, ed. *Thomas Jefferson's Farm Book: With Commentary  
and Relevant Extracts from Other Writings*. Charlottesville:  
University Press of Virginia, 1978, originally published, Princeton, NJ,  
1953.

"A Bill to Amend the Charter of Alexandria." *Dunstable*. [Alexandria], 1804.

Brown, John A. *A Treatise on Practical Farming, Especially Particularly the  
Economic Subjects, viz. The Use of Plaster of Paris, with Directions  
for Using It, and General Observations on the Use of Other Manures,  
On Farm Phosphorus, Their Sources of Origin, Method of Preparation,  
Fruit Trees from Decaying, and Farming in General*. Philadelphia,  
MD: John B. Colver, 1840.

Brown, John A. *A Treatise on Practical Farming*. . . Second Edition.  
Richmond: S. Powers, 1864.

Budget, Samuel. *Estimating: A Systematic Manual for the United States of  
America*. Washington: Printed for the Author, 1804.

Burkegood, Robert De Witt. *A Treatise on Roads, Their History, Character  
and Usage, being the Substance of Two Lectures*. . . Albany: N.Y.  
Oliver Bond, 1835.

Byrd, John P., ed. *The Papers of Thomas Jefferson*. 38 Volumes to date.  
Princeton: Princeton University Press, 1955.

Bentley, A.G., ed. *The Journals of Nicholas Courtell, 1774-1777*. Second Edition. New York: Oak Press, 2009.

Breast de Warville, J.P. *New Travels in the United States of America, 1788*. Daniel Schrevers, ed. and trans., and Marc Soudan Vancot, trans. Cambridge, MA: Harvard University Press, 1994, originally published Paris, 1791.

Brooks, R. *Brooks' General Gazetteer Improved, or, Comprehensive Geographical Dictionary in Miniature...*. Baltimore: Joseph Cushing, 1815

Bullis, Nicholas J.B., trans. and ed. *Under Their Vine and Fig Tree, Travels through America in 1797, 1799, 1800, with Some Further Account of Life in New Jersey, by John Urey, Narrator*. Volume 14 in the Collections of the New Jersey Historical Society. Elizabeth, NJ: The Grassman Publishing Inc., 1946

*Bye Laws for the Organization and Government of the Charleston Academy, in Pickens County, Yamaca*. Adopted by the Board of Trustees, 2d February, 1795. Alexandria, VA: Henry Cecil, 1796

Caldwell, John Edwards. *A Tour Through Part of Virginia, in the Summer of 1805*. William M.E. Barthol of Richmond Dietz Press, Inc., 1964, originally published: New York, 1809

Carmen, Harry J., ed. *American Handbuck*. Port Washington, NY: Kennick Press, Inc., 1939, originally published, London, 1773

"Charles Bellini, First Professor of Modern Languages in an American College." *William and Mary Quarterly*, 3rd Ser. 1 (January 1939): 1-25

*A Citizen of America* [John O'Donogh] *Political Opinions, Particularly Respecting the Federal System*. [Georgetown]. Printed for the Author, 1790.

"Constitution of the Alexandria Society for the Promotion of Useful Knowledge." *Examiner*. n.d. Alexandria, VA: Samuel Hanson, 1780

Cow, Truch. *A View of the United States of America...*. Philadelphia: William Hall and Wright Devlinson, 1794

Cross, Raphael. *The Progress Detected*. Baltimore: John Hayne, 1798

- Coxs, James, ed. *Letters of Richard Henry Lee*. 2 Volumes. New York: McMillan Company, 1914.
- Devin, John. *Travels of Four Years, and a Half, in the United States of America During 1798, 1799, 1800, 1801, and 1802*. A.J. Morrison ed. New York: Henry Holt and Company, 1909.
- Devin, Richard Beale. ed. *A Jeffersonian American: Notes on the United States of America Collected in the Years 1800-2, 7, and 21-22 by the American John Devin, Esq.* San Marino, CA: The Huntington Library, 1994.
- "Emigration from Virginia to the West. J. Watkins to Nathaniel Macon, 27th August 1790." *William and Mary Quarterly*. 1st Ser. 14 (October 1957): 94-95.
- "Emigration from Virginia to North Carolina and the Other Southern Colonies: Letter from James Murray to Hon. Philip Ludwell." *William and Mary Quarterly*. 1st Ser. 14 (October 1957): 95-96.
- Frost, Thomas. *High Summary on the Laws or Properties of Matter, Containing Elements or Principles of Modern Chemistry, with Many Particular Details of those Practical Parts of the Science Most Interesting to Mankind, and Connected with Domestic Affairs*. New York: Buelow and Bousquet, 1806.
- Fulton, Ferdinando. *A Memorial of Ferdinando Fulton, Against the Execution of the Patents Granted to Robert Fulton, for Improvements in Fire-Engines, Vessels, &c.* Washington: Edward A. Smith, 1815.
- Fitch, John. *The Original System Best Supported, or, A Reply to Mr. James Sumner's Pamphlet, Showing the True Priority of John Fitch, and the Falsity, &c. of James Sumner*. Philadelphia: Trenchard's Press, 1788.
- Fitch, John. "Fitch and Remondone Reed at the House of Assembly on the Fitchcraft matter." *Broadside*. Philadelphia, 1790.
- Fitch, John. "To the Honorable House of Representatives of the Commonwealth of Pennsylvania." *Broadside*. Philadelphia, 1788.
- Fisher, Philip Vickers. *Journal, 1713-1718, Written in the Virginia, Essequibo, Frontier and the Army Around New York*. Robert Grenville-Hill and Leonard Krieger, eds. Princeton: Princeton University Press, 1934.

- Parsons, John C. ed. *The Papers of George Washington, 1786, 1787: 4 Volumes*. Boston: Houghton Mifflin Company, 1906.
- Parsons, John C. ed. *The Writings of George Washington from the Original Manuscript Sources, 1754-1799*. 39 Volumes. Washington: Government Printing Office, 1894-1894.
- Paine, Eric. ed. *Thomas Paine, Collected Writings*. New York: Library of America, 1995.
- Paul, Paul Leicester. ed. *The Works of Thomas Jefferson, Federal Edition*. 12 Volumes. New York: G.P. Putnam's Sons, 1904-1905.
- Poor, Washington C. ed. "Story of Mrs. William Thornton, 1800." *Records of the Columbia Historical Society*. 10 (2007): 66-826.
- A Friend of John Pech. (known as) *An Examination of Catechismus B. Colden's Book, Entitled A Life of Robert Fulton*. N.p., 1818.
- Quincy, Albert. *A Sketch of the Finances of the United States*. New York: William A. Davis, 1798.
- Quincy, Albert. *Considerations on the Currency and Banking System of the United States*. Philadelphia: Carey & Lea, 1801.
- "Quintessence: the Permanent Residents of Congress." *Broadsheet*. Alexandria, VA: Samuel Henson, 1788.
- Rogge, William M. *A Short History of Paper Money and Banking in the United States to which is Prefixed an Inquiry into the Principles of the System*. 3 Volumes. New York: Augustus M. Kelley Publishers, 1965; originally published 1810.
- Hamilton, James G. ed. *The Works of Alexander Hamilton, Comprising His Correspondence, and His Political and Official Writings, (Discourses of the Federalist, Civil and Military)*. 7 Volumes. New York: Charles S. Francis and Company, 1851.
- Three Merchants in Virginia in 1781: Letters to Alexander Hamilton, from Gen. Edward Corcoran." *William and Mary Quarterly*. 3rd Ser. 3 (April 1956): 148-148.
- Hunt, Oswald, ed. *The Writings of James Madison....*. 8 Volumes. New York: G.P. Putnam's Sons, 1900-1910.

Jensen, Charles Williams. The Stranger in America, 1793-1893. Carl S. Driver, ed. New York: The Putnam Press, 1933 originally published London, 1907

Jefferson, Thomas. Notes on the State of Virginia. William Peden, ed. Chapel Hill: University of North Carolina Press, 1958

Johson, S. W. Rural Economy: Containing a Treatise on Farm Building, On Buildings in General, On the Culture of the Rice, and On Swampy Lands. New York: William Miller, 1868

"The Journal of Joseph Quincy, June-July 1773." Massachusetts Historical Society Proceedings 49 (October 1945-June 1946): 459-61

Kennel, Lord Henry John. The Gentleman Farmer: Being an Attempt to improve Agriculture by Subjecting it to the Test of Natural Philosophy. Edinburgh: W. Creech, 1778

Kilgore, John H. The Wheat Plant, Its Origin, Culture, Growth, Development, Composition, Varieties, Diseases, Etc., Etc., Together with a New Remarks on Indian Corn, Its Culture, Etc., Chesapeake Moore, Wilkes, Keys & Co. 1868

Logs of the Mayor and Commonality of the Town of Alexandria, To Which are Preceded, Acts of the Legislature of Virginia Respecting the Town of Alexandria. Alexandria, V.A. John and James D. Wierman, 1880

Low, William. Observations on the River Potomack, the Country Adjacent, and the City of Washington. New York: Samuel London and Son, 1793

Lee, Ludwell. An Oration, Delivered October 8th, 1793, Before the Alexandria Society for the Promotion of Useful Knowledge. Alexandria, V.A. Benson and Bond, 1793

"Letter from George W.P. Curtis, Addressed to the Speaker, Enjoining Ready Execution Agreed to by the Delegates of Alexandria County." Resolutions Presented to the House of Representatives [Alexandria] 1864

"Letter from the Mayor of the Town of Alexandria." Enjoining Ready Execution of the Orders of the Town and County of Alexandria. Resolutions Presented to the House of Representatives [Alexandria] 1864

- "Letter of William H. Coffell and John Cramer." *William and Mary Quarterly*. 1st Ser. 8 (April 1950): 248-249.
- Letters and Recollections of George Washington, Being Letters to Tobias Lear and Others between 1788 and 1792....* New York: Doubleday, Page & Company, 1908.
- Letters from his Excellency George Washington to Arthur Young and Sir John Sinclair, Comprising an Account of his Husbandry.* Alexandria: Collins and Stewart, 1805.
- "Letters of James Ramsey, Director of the Steamboat." *William and Mary Quarterly*. 1st Ser. 10 (January and April): 104-124, 229-251, and 26 July 1950: 21-24.
- "Letters of Robert Plemons, of Curles." *William and Mary Quarterly*. 1st Ser. 1 (April 1923): 107-113.
- "The Lewis Powell Correspondence." *The John P. Bunch Historical Papers of Randolph-Macon College* 1 (June 1934): 32-47, June 1935: 111-128, and June 1936: 177-196.
- Locke, John. *Two Treatises of Government*. Peter Laslett, ed. New York: New American Library, 1963. edition originally published: Cambridge 1898.
- Martin, Joseph. *Comprehensors Quarters of Virginia, and the District of Columbia....* Charlottesville, VA: Sharkey & Thompson, 1838.
- Mays, David John, ed. *The Letters and Papers of Edmund Pendleton, 1724-1828*. 3 Volumes. Charlottesville: University Press of Virginia, 1967.
- "Memorial of Sandley Frothingham and Inhabitants of the Town of Alexandria." *Proceedings Presented to the House of Representatives* [Alexandria] 1801.
- Merrison, Samuel. *Richmond in Difficult Days*. New York: Arno Press, 1975. originally published: Richmond 1856.
- Morse, Gouverneur. *A Diary of the French Revolution*. 2 Volumes. Boston: Cary Devensport, ed. Boston: Houghton Mifflin Company, 1838.
- Morse, A.J., ed. "The Letters of Roger Atkinson, 1769-1776." *Virginia Magazine of History and Biography* 15 (April 1908): 245-260.

Morris, A. J., ed. *Travels in Virginia in Revolutionary Times: Speeches*  
Ed. J. P. Bell, 1922

Morse, Jedidiah. *The American Geographer, or A View of the Present  
Situation of the United States of America*. New York: Arno Press,  
1978 (originally published: Elizabethtown, NJ, 1789)

Morse, Jedidiah. *The American Geographer*..... New York: Arno Press, 1971  
(originally published, Boston, 1787)

Moss, Green L., ed. "Washington and the Potomac: Manuscripts of the  
Manassas Historical Society, 1774-1789-1790." *American Historical  
Review*, 38 (April and July 1932): 487-522, 750-752

Parr, Antonio Truxa, and ed. *Luigi Castellani's Virginia: Travels in the  
United States of North America, 1734-1735*. Syracuse, NY: Syracuse  
University Press, 1963

Pedgley, James A., ed. "Letters of James Humay." *Maryland Historical  
Magazine* 58 (March, June and September 1957): 18-24, 126-127, 271-  
281

Penn, Thomas. *Dissertation on Government, the Affairs of the Bank, and  
Paper Money*. Philadelphia: Charles Cist, 1766

*The Pennsylvania, Delaware, Maryland, and Virginia Almanack and  
Epheemeris for the Year of Our Lord, 1733*..... Baltimore: M. N.  
Goddard, [1733]

*The Pennsylvania, Delaware, Maryland, and Virginia Almanack and  
Epheemeris for the Year of Our Lord, 1734*..... Baltimore: William  
Goddard, [1734]

*The Pennsylvania, Delaware, Maryland, and Virginia Almanack and  
Epheemeris for the Year of Our Lord, 1735*..... Baltimore: William  
Goddard and James Aggill, [1735]

*The Pennsylvania, Delaware, Maryland, and Virginia Almanack and  
Epheemeris for the Year of Our Lord, 1736*..... Baltimore: William  
Goddard and James Aggill, [1736]

Peters, Robert. *Account of a Journey in France, Paris, Also, Some  
Observations and Conjectures on that Subject, When Applied to  
Britain*..... Philadelphia: Charles Cist and John Markland, 1757

Phillips, J. *A General History of Ireland, Sligo, Fermanagh, Fermana, and Donnellagh, Containing a Complete Account of the County Already Extented in Ireland, with Observations on those Proposals, to Which are Added Practical Observations*. London: J and J Taylor, 1766.

"Plan of the Town of Alexandria." Broadside. Alexandria, VA. J V. Thomas 1796.

*The Spanish Almanack, or the Washington Ephemeris, for the Year of Our Lord 1792....* Annapolis, MD: James Duple, 1792.

Payson, Robert C., ed. *A Biographical Sketch of Col. Lewis Payson, Including His Correspondence During the Revolutionary War*. Alexandria, VA: C.H. Bessy & Son, 1871.

Payson, Frank D., ed. *The Autobiography of John Fack*. Philadelphia: American Philosophical Society, 1878.

President and Directors of the Potomac Company. "Entired as We Are, With the Interests of the Company..." Broadside. [Alexandria]. 1796.

"Penton Papers." *Yankee Magazine of History and Biography* 37 (April 1915): 157-58.

Pfizer, Charles, ed. *Contemporary Biography: Compelling Memoirs of the Following Personages....* New York: G. & E. Wats, 1852.

Reid, George. *Leeds Discovery, Especially Interesting to Planters and Farmers, Relative to Fertilizing Soil and Exhausted Lands, Upon a Chain and Carr Plan....* Winchester, VA: J.A. Leeson, 1800.

Richards, Gertrude H.B., ed. "Dr. David Stewart Report to President Washington on Agricultural Conditions in Northern Virginia." *Virginia Magazine of History and Biography* 61 (July 1955): 243-262.

Ridson, Walter W., ed. *A Survey of the Roads of the United States of America, 1789, By Christopher Colles*. Cambridge, MA: Harvard University Press, 1961.

- Bachelmann's Lament. François Alexander Fréchet, *de la Terre Through the United States of North America, the Country of the Indians, and Upper Canada, in the Years 1776, 1778, and 1780, with an Authentic Account of Lower Canada*. 2 Volumes. H. Newman, trans. London: B. Phillips, 1789.
- Bairland, Kate Munn, ed. "Merchants and Mills: From the Letterbook of Robert Carter of Newmyr, Wincoburnham County." *William and Mary Quarterly*. 1st Ser. 11 (April 1954): 242-246.
- Burney, James. *A Short Treatise on the Application of Steam, Whereby it Can be Shown, From Actual Experiments, that Steam May be Applied to Propel Boats or Yards of any Burthen Against Rapid Currents with Great Velocity*. Philadelphia: Joseph James, 1766.
- Burney, James. "Proposals for Forming a Company to Build James Burney to Carry into Execution, on a Large and Extensive Plan, His Steam Boat and Steamy Oiler Machines Herein after Mentioned &c;c." *Scrapside*. Philadelphia: 1766.
- Burney, James. *Explanation of a Steam Engine, and the Method of Applying it to Propel a Boat*. Philadelphia: Joseph James, 1766.
- Burney, James. *The Explanation and Approved Plans of the Following Improvements in Mechanics, viz. 1st. A New Constructed Robot, And A Machine for Raising Water, 2d. A Great Mill, 3d. A Saw Mill, &c.* Philadelphia: Joseph James, 1766.
- Bussell, Robert. *North America, Its Culture and Climate: Describing Observations on the Agriculture and Climate of Canada, the United States, and the Island of Cuba*. Edinburgh: Adam and Charles Black, 1807.
- Butland, Robert A., ed. *The Papers of George Mason, 1728-1792*. 3 Volumes. Chapel Hill: University of North Carolina Press, 1970.
- Schwarz, Johann David. *Tourists in the Confederation, 1782-1786*. 2 Volumes. Alfred J. Harrison, ed. New York: Bergman Publishers, 1965; originally published 1786.
- Schwarz, Yasha, North, and Florence Spinkman Lavin, eds. *The 1781 Census of Virginia....*. 2 Volumes. Springfield, VA: Genealogical Books in Print, 1987.

- Scott, Joseph. *The United States Gazetteer, Containing an Authentic Description of the Several States, their Situation, Extent, Boundaries, Climate, Population, Trade, and Manufactures....* Philadelphia: P. and E. Bailey, 1785.
- "Selections from the Campbell Papers," *Virginia Magazine of History and Biography* 9 (July 1881): 55-77.
- Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*. 2 Volumes. Edwin Cannan, ed. Chicago: University of Chicago Press, 1978; edition originally published, London: 1794.
- Smith, John Ferdinand Deland. *A Tour of the United States of America*. 2 Volumes. New York: New York Times and Arno Press, 1968; originally published, London, 1794.
- Stewart, W.D., ed. "Abstracts of Virginia Land Patents." *Virginia Magazine of History and Biography* 1 (January 1894): 154-254.
- Stewart, Aaron. *Twenty-Two Years a Slave, and Forty Years a Freeman....* New York: Negro Universities Press, 1968; originally published, New York: 1858.
- Strickland, William. *Observations on the Agriculture of the United States of the United States of America*. London: W. Bulmer & Co., 1881.
- Taylor, John. *Definition of Parties, or the Political Effects of the Power System Considered*. Philadelphia: Francis Bailey, 1794.
- Taylor, John. *An Enquiry into the Principles and Tendency of Certain Public Measures*. Philadelphia: Thomas Dobson, 1794.
- Taylor, John. *Aristor: Being a Series of Agricultural Essays, Practical and Political, in Seven One Shillings*. Fourth Edition. Fenchurch: Whitworth & Tinsley, 1818; originally published, 1812.
- Thornton, William. *Short Account of the Origin of Free Masons, Written in 1823, and Now Communicated to Press....* Washington: Rapine and Elliot, 1824.
- Trudeau, Harry. *The Western Country in 1793, Reports on Kentucky and Virginia*. Marion Tilling and Godfrey Davies, eds. San Marino: CA: Huntington Library, 1968.

- Yule, Charles. *Topographical Description of the Counties of Frederick, Berkeley & Jefferson, Situated in the State of Virginia....* Winchester VA W. Beckett 1818
- The Virginia and Farmer's Almanac for the Year of Our Lord 1793*  
Winchester VA, Richard Bowen 1793
- The Virginia Almanac for the Year of Our Lord 1794....* Winchester, VA.  
Richard Bowen [1794]
- The Virginia Almanac for the Year of Our Lord 1795....* Winchester, VA.  
Richard Bowen [1795]
- The Virginia Almanac for the Year of Our Lord 1796....* Winchester, VA.  
Richard Bowen [1796]
- Ward, D.B. *A Chronological and Statistical Description of the District of Columbia*. Paris Smith, 1818.
- Washington, H.A. ed. *The Writings of Thomas Jefferson, Being His Autobiography, Correspondence, Reports, Messages, Addresses, Other Writings, Official and Personal*. 5 Volumes. New York: J.C. Riker, 1849 [1857]
- Watson, Kenneth. *Men and Times of the Revolution, or The Memoirs of Elizabeth Watson*. Second Edition. Watson C. Watson ed. New York: Burt and Company, Publishers. 1866
- Webster, Noah. *Massellaneous Papers, on Political and Commercial Subjects*. New York: Hart Franklin. 1807 originally published New York: 1802.
- Webster, Federal. *Political Essays on the Nature and Extension of Slavery, Public Property, and Other Subjects. Published During the American War, and Continued Up to the Present Year. 1775*. Philadelphia: Joseph Cranch. 1775
- Weld, Jesse. *Travels Through the States of North America, and the Provinces of Upper and Lower Canada, During the Years 1795, 1796, and 1797*. 3 Volumes. London 1800
- The Will of George Washington*. Baltimore: Thomas Nelson 1980

- Worcester, J. R. *A Geography of the United States, Abstracted from the Universal Gazetteer....* Andrew Plagg and Gould, 1818.
- Wright, Lewis B. and Marvin Tilling, eds. *Geology in Carolina in 1786: 1788. From the Travel Diary and Observations of Robert Hunter, Jr., a Young Merchant of London*. San Marino, CA, Huntington Library, 1943.
- Wright, Lewis B. ed. "William Seaton Takes a Deistal View of Virginia." *Williams and Mary Quarterly* Vol. 34: 3 (January 1976): 166-167.
- Young, Samuel. *A Tourist on Internal Navigation, Examining the Principles by which Canals and Their Appendages, viz. Locks, Cuts, Connected and Lost, is Regain....* Baltimore, Md. N.Y. C.F. Rowland, 1827.

### Secondary Sources

#### Books and Articles

- Adams, Donald B. *Finance and Enterprise in Early America: A Study of Stephen Girard's Bank, 1812-1831*. Philadelphia: University of Pennsylvania Press, 1973.
- Adams, Herbert Becker. *Maryland's Influence upon the Land Company in the United States, with Miscellaneous Papers on George Washington's Interest in Western Lands, the Potomac Company, and a National University*. Johns Hopkins University Studies, Third Series Baltimore: N. Murray, 1886.
- Adams, John Barker. ed. *An Antislavery Sketch by John Marshall*. Ann Arbor: University of Michigan Press, 1927.
- Allen, William. *The Turnpike Road System in England, 1803-1845*. Cambridge: Cambridge University Press, 1978.
- Allen, F. Vernon. *Maritime History of Maryland and Berkeley County, First Virginia*. Hagerstown, MD: Star Publishing Company, 1940.
- Andler, Charles Henry. *Bethlehem in Virginia from 1735-1861*. Chicago: University of Chicago Press, 1915.

- Ansara, Henry. "The Formation of the Republican Party in Virginia, 1793-1798." *Journal of Southern History* 30 (August 1958): 383-318.
- Ansara, Henry. "The Jeffersonian Republicans in Virginia: An Interpretation." *Virginia Magazine of History and Biography* 71 (April 1967): 152-167.
- Anderson, Ralph V., and Robert E. Gallman. "Slaves as Fixed Capital: Slave Labor and Southern Economic Development." *Journal of American History* 64 (June 1977): 24-46.
- Anderson, Matthew Page. "James Ramsey, 'Imaginative Mechanic' and 'Inventive Gentleman'." *West Virginia History* 4 (October 1959): 3-12.
- Appleby, Joyce. "Commercial Farming and the Agrarian Myth in the Early Republic." *American Historical Review* 95 (March 1990): 855-849.
- Appleby, Joyce. *Capitalism and a New Social Order: The Republican Vision of the 1790s*. New York: New York University Press, 1984.
- Appleby, Joyce. *Liberals and Republicans in the Historical Imagination*. Cambridge, MA: Harvard University Press, 1993.
- Aptheker, Herbert. *American Negro Slave Republic*. New York: International Publishers, 1934; originally published, 1943.
- Ashley, L. R. M. "Classical Prejudgments in Europe." *Nations* 14 (December 1949): 189-196.
- Banta, Simon. "Philadelphia Portmanteau: The Institutional Structure of Natural History in the New Republic, 1808-1833." *Journal of the Early Republic* 8 (Summer 1988): 111-136.
- Barnes, Foster. *Cover: Early Chapters in the Development of the Potomac Route to the West*. Washington: Columbia Historical Society, 1912.
- Baskin, Bernard C. *Popular Influence Upon Public Policy: Progressivism in Eighteenth-Century Virginia*. Westport, CT: Greenwood Press, 1978.
- Baskin, Worth. "Silvermaster in Alexandria." *Antiques* (February 1945): 58-59.
- Baskin, Bernard. *The Ideological Origins of the American Revolution*. Cambridge, MA: Harvard University Press, 1967.

- Bader, Bernard. *The Origins of American Politics*. New York: Vintage Books, 1970, originally published: New York, 1968.
- Bancroft, Frederic. *Slave Trading in the Old South*. Columbia: University of South Carolina Press, 1980, originally published: Baltimore, 1931.
- Barnes, Arthur G. *History of the Potomac Coast, Matchless*. Williamsburg, VA: Southside Historical Soc., 1975.
- Barton, Robert. "The Creation of Cosmopolitanism." *Annals of the Association of American Geographers* 80 (March 1992): 34-48.
- Bassett, John Spenser. "The Relation Between the Virginia Planter and the London Merchant." *American Historical Association, Report* 1 (1907): 352-375.
- Benson, Edward. *The Old Dominion and the New Nation, 1789-1801*. Lexington: University Press of Kentucky, 2002.
- Benson, Richard, Stephen Benson and Edward C. Carter II. *Beyond Confederation: Origins of the Confederation and American National Identity*. Chapel Hill: University of North Carolina Press, 1987.
- Berkley, Henry J. "The Port of Danvers, Prince William Co., VA." *William and Mary Quarterly*, 3rd Ser. 4 (April 1940): 99-122.
- Berkman, David. *The Lost South*. New York: Oxford University Press, 1997.
- Beveridge, Andrew A. "Local Leading Function: Baltimore as a Small Northeastern Industrial City, 1810-1815." *Journal of Economic History* 45 (June 1985): 825-423.
- Bjork, Gordon C. "The Weaning of the American Economy: Independence, Market Changes, and Economic Development." *Journal of Economic History* 34 (December 1974): 741-768.
- Blackman, Robert M. "Pennsylvania Banks and the Panic of 1818: A Reinterpretation." *Journal of the Early Republic* 9 (Fall 1989): 529-558.
- Bliss, Willard F. "The Rise of Tenancy in Virginia." *Virginia Magazine of History and Biography* 36 (October 1930): 427-441.

- Bliss, Wilford F. "The Tobacco in New Virginia." *Virginia Magazine of History and Biography* 30 (October 1922): 287-298.
- Boggs, Ruth. "Peasantry and the New World Economy of Post-Revolutionary America." *William and Mary Quarterly*, 3rd Ser. 43 (July 1986): 394-429.
- Bolin, John R., ed. *Journal...The Middle Period, Essays in Honor of Richard Slatta*. Charlottesville: University Press of Virginia, 1973.
- Bowling, Kenneth B. *Creating the Federal City, 1774-1800*. Potomac, PA: Washington American Institute of Architects Press, 1996.
- Boyd, Thomas. *Lathskinner, Harry Lee*. New York: Charles Scribner's Sons, 1971.
- Brayton, Joanne. "The Women Who Weren't There: Women's Market Labor and the Transition to Capitalism in the United States." *Journal of the Early Republic* 16 (Summer 1996): 143-208.
- Brown, T.H. *Tobacco Culture: The Materiality of the Slave Plantation on the Eve of Revolution*. Princeton: Princeton University Press, 1995.
- Brown, T.H. "An Empire of Goods: The Anglicization of Colonial America, 1600-1770." *Journal of British Studies* 35 (October 1996): 487-508.
- Brown, T.H. "Narratives of Commercial Life: Consumption, Ideology, and Community on the Eve of the American Revolution." *William and Mary Quarterly*, 3rd Ser. 50 (July 1993): 411-501.
- Brudenburgh, Carl. *The Colonial Craftsman*. New York: New York University Press, 1950.
- Brody, David. "Time and Work During Early American Industrialism." *Labor History* 30 (Winter 1989): 1-46.
- Brown, Alexander Condie. *The United States Canal*. Chesapeake VA: Norfolk County Historical Society, 1970.
- Brown, Richard D. *Modernization: The Transformation of American Life, 1800-1860*. New York: Hill and Wang, 1976.
- Brown, Stuart E. *Virginia Bacon: The Story of Thomas, 6th Lord of Fairfax*. Berryville, VA: Chesapeake Book Company, 1965.

- Brown, William Owsen. *The Lower South as American Backstop*. New York: Universal Press, 1908; originally published, New York, 1902.
- Brownell, Hiram A. "Urbanization in the South: A Unique Experience?" *Biometrika Quarterly* 38 (Spring 1973): 165-180.
- Brownell, Hiram A., and David H. Goldfield, eds. *The City in Southern History: The Growth of Urban Civilization in the South*. Port Washington, NY: Kennikat Press, 1971.
- Brookley, Stuart. "Alexander Hamilton and the State Bank: 1789-1790." *William and Mary Quarterly* 3rd Ser. 27 (July 1970): 347-378.
- Buell, Richard. *Securing the Republic: Ideology in American Politics, 1783-1828*. Ithaca: Cornell University Press, 1973.
- Cabell, N.P. "Some Fragments of an Intended Report on the Post-Revolutionary History of Agriculture in Virginia." *William and Mary Quarterly* 1st Ser. 38 (January 1934): 145-165.
- Campbell, Randolph B. "Research Note: Slave Hiring in Texas." *American Historical Review* 55 (February 1966): 107-114.
- Cassidy, Frank A. "The Great Bakemono Riot of 1843." *Marshall Historical Magazine* 70 (Fall 1976): 241-250.
- Chaplin, Joyce K. *An American Farmland: Agricultural Innovation and Modernity in the Lower South, 1730-1820*. Chapel Hill: University of North Carolina Press, 1982.
- Chickland, S.G. "American versus West Indian Dealers in Liverpool: 1793-1813." *American Economic Review* 18 (June 1958): 141-150.
- Chiswood, Oliver Perry. *Richard Henry Lee: Statesman of the Revolution*. Morgantown: West Virginia University Library, 1947.
- Christopher, Walter. *Central Places in Southern Germany*. Carlisle: Brookmans Engineering Cliffs: NJ: Prentice-Hall, 1969; originally published, 1939.
- Clark, Allen C. "The Old Mills." *Records of the Columbia Historical Society* 38 (1938): 41-115.

- Clemens, Paul G.E. "The Operation of an Eighteenth Century Chesapeake Tobacco Plantation." *Agricultural History* 49 (July 1975): 577-591.
- Clemens, Paul G.E. *The Tobacco Economy and Colonial Maryland's Eastern Shores, From Tobacco to Grain*. Ithaca, Cornell University Press, 1968.
- Clinton, Catherine. *The Plantation Mistress: Woman's World in the Old South*. New York: Farrar, Rinehart, 1944.
- Cole, David H. *The Development of Drinking in the District of Columbia*. New York: William Frederick Press, 1959.
- Conner, Michael P. "A Transient Interpretation of the Growth of Urban Regions: An American Example." *Journal of Historical Geography* 1 (October 1975): 381-392.
- Cook, Joseph E. *Tobacco, Corn, and the Early Republic*. Chapel Hill: University of North Carolina Press, 1978.
- Crooks, Avery O. *Soil Exhaustion as a Factor in the Agricultural History of Virginia and Maryland, 1606-1862*. Urbana: University of Illinois Press, 1936.
- Cronon, William. *Nature's Metropolis: Chicago and the Great West*. New York: W.W. Norton, 1991.
- Cutcliffe, Stephen H., and Robert C. Root, eds. *In Context: History and the History of Technology*. Bethlehem, PA: Lehigh University Press, 1998.
- Cutler, William Perkins, and Julia Perkins Cutler. *Life, Journals, and Correspondence of Rev. Mansuet Cutler, LL.D., 2 Volumes*. Concordia: Robert Clarke & Co., 1898.
- Daniel, Clarence H. "The Tools and Implements of Agriculture." *Agricultural History* 46 (January 1972): 81-99.
- Davis, David Brian. *Slavery and Human Progress*. New York: Oxford University Press, 1994.
- Davis, Joseph Stoddard. *Slavery in the Early History of America's Dependencies*. 2 Volumes. New York: Russell & Russell Inc. 1966 (originally published: Cambridge, MA, 1917).

- Boris, Lance E. "The New England Textile Mills and the Capital Markets: A Study of Industrial Borrowing, 1840-1860." *Journal of Economic History* 50 (March 1990): 1-30.
- Boris, Lance E. "Mr. Vassar on Industrial Borrowing: A Reply." *Journal of Economic History* 51 (June 1991): 323-330.
- Boris, Lance E., and Peter Bastia Pappas. "From Benevolence to Business: The Story of Two Savings Banks." *Business History Review* 53 (Winter 1979): 354-380.
- Brooks, Alexander. *Expanding Alliance: Politics and Diplomacy Under George Washington*. Durham, N.C.: Duke University Press, 1984.
- McCord, Alexander. *The Slave War: The Politics and Diplomacy of the Unfinished War*. rev. edn. (1981). New York: Charles Scribner's Sons, 1998.
- Chapman, Edward S. *The Life of Thomas Jefferson*. New York: Frederick R. Hartshorn, 1917.
- Clay, Taly L. "Waywardness or Misconduct? Impaired Maryland Representations of Pottery and the Gendered Self in Eighteenth Century Philadelphia." *Journal of American History* 83 (June 1994): 11-30.
- Dorsey, Thomas M. *A Yankee Spirit of Enterprise: Merchants and Economic Development in Revolutionary Philadelphia*. New York: W. W. Norton, 1964.
- Drayton, Melvin. "Was Slavery Dying Before the Cotton Gin?" In *High History: A Reassessment*. Ed. Melvin Drayton. New York: Doubleday & Company, 1968.
- Dunaway, Wayland Fuller. *History of the James River and Roanoke Company*. New York: Columbia University Studies in History, Economics and Public Law, Volume 146, 1952.
- Durrahawyer, Joseph Amos. *Tombstone: A Study of the Tall Road Monument in the Middle Atlantic States and Maryland*. Vol. 1. Ch. Southern Association and Printing Company, 1893.

- Earle, Corvella V. *The Evolution of a Tobacco Settlement System, All Talities, Parish, Maryland, 1800-1830*. Chicago: University of Chicago Department of Geography Research Paper No. 179, 1973.
- Earle, Corvella V. "A Single Interpretation of Slavery and Free Labor." *The Geographical Society* 58 (January 1978): 51-63.
- Earle, Corvella, and Ronald Hoffman. "Single Crops and Urban Development in the Eighteenth Century South." *Perspectives in American History* 18 (1978): 7-26.
- Earle, Corvella, and Ronald Hoffman. "The Foundation of the Modern Economy: Agriculture and the Costs of Labor in the United States and England, 1600-80." *American Historical Review* 80 (December 1969): 1058-1094.
- Edwards, Everett R. ed. *Slavery and Agriculture*. New York: Arno Press, 1976. originally published: Washington: 1945.
- Egerton, Douglas B. *Charles Pinckney Storer and the Trail of National Constitution*. Jackson: University of Mississippi Press: 1989.
- Egerton, Douglas B. "Markets Without a Market Revolution: Southern Planters and Capitalism." *Journal of the Early Republic* 14 (Summer 1994): 187-221.
- Egert, Marc A. *Market Empire: The Origins of the American Revolution*. Ithaca: Cornell University Press, 1988.
- Elmquist, Chester E. "The Farmer in the Eighteenth Century Americas." *Agricultural History* 38 (July 1964): 207-223.
- Ellis, Stanley, and Ben McKassock. *The Age of Federalism: The Early American Republic, 1788-1800*. New York: Oxford University Press: 1993.
- Emery, Fred A. "Dealers and Bankers in the District of Columbia." *Records of the Columbia Historical Society* 48-49 (1946-1948): 567-689.
- Ernst, Joseph A., and H. Ray Munnis. "Columbia's Turbulent Past: the Slave." *The Urban Process in the Southern Colonies during the Eighteenth Century*. *William and Mary Quarterly*, 3rd Ser. 50 (October 1993): 649-674.

- Evans, James D. "Lt. Col. Lewis Powell." *William and Mary Quarterly*, 3rd Ser. 10 (April 1953): 133-141.
- Evans, Walter B. *History of Berkeley County, West Virginia*. Martinsburg, WV: privately published by the author, 1935.
- Faber, Paul G. *Mechanics and Manufacturers in the Early Industrial Revolution, Lynn, Massachusetts, 1780-1860*. Albany: State University of New York Press, 1966.
- Fendler, Harold Underwood. *American Economic History*. English Edition. New York: Harper and Brothers, 1960.
- Fenn, Susan. "Patrons, Bankers, and Western-Class Solutions in the Antebellum South." *Journal of Economic History* 42 (March 1982): 61-87.
- Fenstermaker, J. Van. *The Development of American Commercial Banking, 1781-1837*. East, OH: East State University Bureau of Economic and Business Research, 1965.
- Fenstermaker, J. Van. "The Statistics of American Commercial Banking, 1781-1837." *Journal of Economic History* 15 (September 1955): 400-413.
- Ferguson, E. James. *The Power of the Purse: A History of American Public Finance, 1789-1917*. Chapel Hill: University of North Carolina Press, 1961.
- Ferguson, E. James. "Political Economy, Public Liberty, and the Formation of the Constitution." *William and Mary Quarterly*, 3rd Ser. 40 (July 1983): 389-431.
- Ferguson, Eugene E. "Toward a Discipline of the History of Technology." *Technology and Culture* 15 (January 1974): 18-39.
- Feldt, Barbara J. *Slavery and Freedom in the Middle Ground: Maryland during the Nineteenth Century*. New Haven: Yale University Press, 1987.
- Feldman, Paul. "Thomas Jefferson and Antislavery: The Myth Goes On." *Virginia Magazine of History and Biography* 102 (April 1996): 183-238.

- Fischer, David Hudson. *Albion Seed: Four British Peddlers in America*. New York: Oxford University Press, 1949.
- Fogel, Robert William, and Stanley L. Engerman. *Tane on the Cross: The Economics of American Negro Slavery*. New York: W. W. Norton, 1969, originally published 1931.
- Ford, John Vincent. "The Economic Philosophy of John Taylor." *William and Mary Quarterly*. 2nd Ser. 9 (July 1952): 323-333.
- Fox-Grosvore, Elizabeth. *Within the Plantation Household: Black and White Women of the Old South*. Chapel Hill: University of North Carolina Press, 1996.
- Fox-Grosvore, Elizabeth, and Eugene Grosvore. *Ericks of Merchant Capital, Slavery, and Bourgeois Property in the Rise and Expansion of Capitalism*. New York: Oxford University Press, 1989.
- Fries, Joseph E. S. J., and Jacob Fells, eds. *Business Enterprises in Early New York*. Tarrytown, NY: Sleepy Hollow Press, 1978.
- Gallman, Robert E. "Self Sufficiency in the Cotton Economy of the Antebellum South." *Agricultural History* 44 (January 1970): 1-23.
- Galpin, W. Freeman. "The Great Trade of Alexandria: Virginia 1641-1649." *North Carolina Historical Review* 4 (October 1977): 400-437.
- Gardner, Michel Hershkov, and Ann Hershkov Gardner. *Chronicles of Old Berkeley: A Narrative History of a Victorian County from Its Settlement in 1826*. Durham, NC: Southern Press, 1996.
- Gertz, Clifford. *Local Knowledge: Further Essays in Interpretive Anthropology*. New York: Basic Books, 1983.
- Grosvore, Eugene. *The Political Economy of Slavery: Studies in the Economics and Society of the Slave South*. Second Edition. Middletown, CT: Wesleyan University Press, 1989, originally published, 1965.
- Grosvore, Eugene, Ed., Jordan, Ed., The. *Wardrobe Slaveholders Made*. New York: Vintage Books, 1976, originally published, 1974.
- Gilbert, Felix. *To the Farwell Address: Ideas of Early American Thought*. Eding: Princeton: Princeton University Press, 1961.

- Giblin, David T., ed. *The Growth of Seaport Cities, 1550-1825*.  
Charlottesville, University Press of Virginia, 1987.
- Gibbs, Paul A. "The Pace of Capitalism in the Early Republic." *Journal of the Early Republic* 16 (Summer 1996): 355-381.
- Gill, Ronald B. "Wheat Culture in Colonial Virginia." *Agricultural History* 32 (July 1958): 348-355.
- Goldfield, David B. *Upland Growth in the Age of Secessionism: Virginia, 1803-1861*. Baton Rouge: Louisiana State University Press, 1977.
- Goldfield, David B. *Cotton, Politics, and Slavery: Southern Cotton and Slavery, 1803-1861*. Baton Rouge: Louisiana State University Press, 1988.
- Goodrich, Carter, ed. *Canada and American Economic Development*. New York: Columbia University Press, 1981.
- Greene, H.A. "The First American Steamboat." *American Seaman* 10: 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.
- Greene, George D. *Finance and Economic Development in the Old South, 1803-1861*. Stanford, CA: Stanford University Press, 1979.
- Greenberg, Kenneth S. *Slavery and Secession: The Political Culture of Antislavery Slavery*. Baltimore: Johns Hopkins University Press, 1988.
- Greene, Jack P. "Character, Person, and Authority: A Study of Alternative Styles of Political Leadership in Revolutionary Virginia." In *The Revolutionary War in the South: Power, Conflict, and Leadership*. Essays in Honor of John Richard Alden, edited by W. Robert Higgins. Durham, NC: Duke University Press, 1979.

- Gordon, John C. *American Slavery in the Age of Jefferson*. Ames: Iowa State University Press, 1964.
- Gruber, Allen Garfield. *Superstition and Control at Virginia State Banks*. Charlottesville: University of Virginia Institute for Research in the Social Sciences, 1977.
- Gruber, John G., and J. B. Shaw. "Financial Aspects of Economic Development." *American Economic Review* 46 (September 1956): 515-526.
- Hahn, Harry, and Jonathan Prude, eds. *The Countryside in the Age of Capitalist Transformation: Essays on the Social History of Rural America*. Chapel Hill: University of North Carolina Press, 1985.
- Hall, David D. *Worlds of Wonder, Days of Judgment: Popular Religious Beliefs in Early New England*. New York: Alfred A. Knopf, 1980.
- Hammond, Bray. *Banks and Politics in America, from the Revolution to the Civil War*. Princeton: Princeton University Press, 1957.
- Hanslin, Oscar and Mary. "The Origins of the American Business Corporation." *Journal of Economic History* 3 (May 1943): 1-20.
- Harris, Jan and Leslie Single. "Matchless: Virginia, An Enclave Town on the Potomac." *Virginia Geographer* 14 (Spring/Summer 1960): 24-30.
- Hardison, Nicholas P. *Shocks, Shocks, and Young Shockers: Corn as a Way of Life in Forest America*. Baton Rouge: Louisiana State University, 1981.
- Harris, J. William. *Black Folk and Gospel in a Slave Society: White Liberty and Black Slavery in Antislavery Heartlands*. Middletown, CT: Wesleyan University Press, 1985.
- Harrison, Francis. *Landmarks of Old French Williamsburg, Capital of Dominion in Northern Virginia*. 2 Volumes. Richmond: Old Dominion Press, 1918.
- Hart, Freeman H. *The Valley of Virginia in the American Revolution, 1781, 1782*. Chapel Hill: University of North Carolina Press, 1942.
- Harris, Louis. *The Liberal Tradition in America*. New York: Harcourt Brace Jovanovich, 1955.

- Sheworth, Paul Lebond. *George Washington: Farmer, Boss, an Account of His Home Life and Agricultural Activities*. Indianapolis: Bobbs-Merrill Company, 1915.
- Steel, James W. *History and Comprehensive Description of Loudoun County, Virginia*. Loudoun, VA: Park View Press, 1998.
- Steedman, Sue E. *The Political Economy of the Family Farm: The American South of American Capitalism*. New York: Praeger Publishers, 1995.
- Stevenson, G. Melvin. "Agriculture in America in the 1790s: An Englishman's View." *Agricultural History* 40 (July 1976): 505-506.
- Stevenson, G. Melvin. "Agricultural Reform in Antebellum Virginia: William Nash, Jr., a Case Study." *Agricultural History* 52 (July 1978): 504-508.
- Steele, Brooke. *The Pursuit of Science in Revolutionary America, 1735-1789*. Chapel Hill: University of North Carolina Press, 1996.
- Steele, Brooke, ed. *Early American Science*. New York: Barnes History Publications, 1976.
- Steele, Brooke. *Evolution and Innovation*. New York: New York University Press, 1985.
- Steele, Brooke. "James Rumsey and the Rise of Steamboating in the United States." *West Virginia History* 46 (1966): 53-65.
- Tharshman, Albert O. *The Strategy of Economic Development*. New Haven: Yale University Press, 1958.
- Hoffman, Ronald-John, John F. McCusker, Russell E. Menard, and Peter J. Albert, eds. *The Economy of Early America: The Revolutionary Period, 1763-1792*. Charlottesville: University Press of Virginia, 1988.
- Holmes, Warren B. "The Virginia Backcountry in the Eighteenth Century: The Question of Origins and the Issue of Outcomes." *Virginia Magazine of History and Biography* 101 (October 1995): 545-568.
- Holmes, Warren B., and Robert E. Mitchell. "Town and Country in Backcountry Virginia: Winchester and the Shenandoah Valley, 1700-1800." *Journal of Southern History* 59 (November 1993): 619-640.

- Holladay, William. Delightful Made Easy: History of the Termination of Baltimore City and County. Cockeysville, MD: Baltimore County Historical Society, 1978.
- Horne, Thomas A. "Bourgeois Virtue: Property and Moral Philosophy in America, 1780-1860." History of Political Thought 4 (Summer 1963): 317-348.
- Horne, Thomas A. Property Rights and Poverty: Political Argument in Britain, 1805-1834. Chapel Hill: University of North Carolina Press, 1990.
- Horsman, Reginald. The Highway of the New Republic, 1776-1815. Arlington Heights, IL: Harlan Davidson, 1985.
- Hove, Charles E. "The Financial Institutions of Washington City in Its Early Days." Records of the Columbia Historical Society 5 (1905): 1-42.
- Hudson, Solomon. "The Development and Present Status of Marine Insurance in the United States." The Annals of the American Academy of Political and Social Science 30 (September 1895): 241-272.
- Hudson, Solomon. "Policy Contracts in Marine Insurance." The Annals of the American Academy of Political and Social Science 30 (September 1895): 273-289.
- Hughes, Sarah S. "Slaves for Hire: The Allocation of Black Labor in Elizabeth City County, Virginia, 1768-1818." William and Mary Quarterly, 3rd Ser. 55 (April 1978): 280-295.
- Hullbert, Archer Butler. Historic Highways of America, Volume III: The Great American Canals, Volume I: The Chesapeake and Ohio Canal, and the Pennsylvania Canal. Cleveland: Arthur H. Clark Company, 1904.
- Hullbert, Archer Butler. Washington and the West. Cleveland: Arthur H. Clark Company, 1911.
- Hunter, Robert F. "Turnpike Construction in Antebellum Virginia." Technology and Culture 4 (Spring 1963): 177-208.

- Hawes, James Willard. *The Legitimacy of the Business Corporation in the Law of the United States, 1783-1913*. Charlottesville: University Press of Virginia, 1970.
- "Incorporating the Republic: The Corporation as Antebellum Political Culture." *Harvard Law Review* 103 (1989): 1,583-1,600.
- Irons, James B. "Exploring the Affinity of Wheat and Slavery in the Virginia Pastorate." *Explorations in Economic History* 35 (July 1998): 326-332.
- Irons, Jeffrey C. "Republicanism vs. Liberalism? A Reconsideration." *History of Political Thought* 9 (Summer 1998): 349-377.
- Irons, Steve. *The Transformation of Virginia, 1780-1785*. Chapel Hill: University of North Carolina Press, 1982.
- Jackson, J. Franklin. *The American Revolution Considered as a Social Movement*. Princeton: Princeton University Press, 1968.
- Johnson, Richard M., ed. *Slavery, Freedom, and Conscience: The American Revolution in Virginia, Massachusetts, and New York*. New York: W. W. Norton & Company, 1979.
- Jones, Merrill. *The New Nation*. New York: Alfred A. Knopf, 1955.
- Jones, Merrill. "The American Revolution and American Agriculture." *Agricultural History* 43 (January 1969): 107-124.
- Johnson, E.A.J. *The Foundations of American Economic Freedom: Government and Enterprise in the Age of Washington*. Minneapolis: University of Minnesota Press, 1973.
- Jones, Daniel P. "Commercial Progress versus Local Rights: Turpin Building in Northwestern Rhode Island in the 1750s." *Rhode Island History* 46 (1999): 30-32.
- Jordan, Winthrop. *White Over Black: American Attitudes Toward the Negro, 1619-1812*. Chapel Hill: University of North Carolina Press, 1968.
- Kaplan, Lawrence S. *Enlightening Americans with Science: American Popular Policy in the Age of Jefferson*. Kent, OH: Kent State University Press, 1987.

- Keith, Allen B. "Belmontians in the British Restrictions on the American Trade with the Dutch West Indies, 1763-1803." *Journal of Modern History* 30 (March 1948): 1-18.
- Kemp, Henry. "James Kennedy and His Role in the Improvement Movement." *West Virginia History* 48 (1988): 1-8.
- Kendall, Samuel. *A History of the Valley of Virginia*. Fourth Edition. Staunton, VA: Shenandoah Publishing House, 1995, originally published 1833.
- Kemp, Leslie J. *Central Place Theory*. Beverly Hills, CA: Sage Publications, 1964.
- Klein, Daniel B. and John Majewski. "Economy, Community, and Law: The Turnpike Movement in New York, 1797-1845." *Law and Society Review* 30 (1996): 609-642.
- Klingenstein, David C. "The Significance of Cattle in the Development of the Tobacco Colonies." *Journal of Economic History* 30 (June 1970): 348-378.
- Klingenstein, David C. and Richard K. Vedder, eds. *Essays in Nineteenth-Century Economic History: The Old Northwest*. Athens: Ohio University Press, 1973.
- Kluber, Benjamin B. "The First Federal Congress and the First National Bank: A Study in Constitutional Interpretation." *Journal of the Early Republic* 30 (Spring 1986): 18-41.
- Koeppe, Robert K. and H. H. Goodrich. *Origins of American Socialism: A Study Made Under the Direction of a Committee of the Faculty of Bryn Mawr University*. Chicago: University of Chicago Press, 1952.
- Koch, Adrienne and Harry Ammon. "The Virginia and Kentucky Revolution: An Episode in Jefferson's and Madison's Defense of Civil Liberties." *William and Mary Quarterly* 3rd Ser. 5 (April 1948): 145-178.
- Kolchin, Peter. *American Slavery, 1619-1812*. New York: Hill & Wang, 1980.
- Kong, David Thomas, ed. *Democracy, Liberty, Prosperity, and Christian Freedom in the New American Republic*. Stanford, CA: Stanford University Press, 1995.

- Kennedy, Jesse. Republicanism and Southern Radicalism: Political Ideology in Late Eighteenth-Century England and America. Ithaca: Cornell University Press, 1984.
- Kellogg, Allen. "The Economic Growth of the Eighteenth-Century Chesapeake Colonies." *Journal of Economic History* 38 (March 1978): 215-288.
- Kellogg, Allen. Tobacco and Slaves: The Development of Southern Culture in the Chesapeake, 1680-1800. Chapel Hill: University of North Carolina Press, 1988.
- Kellogg, Allen. The Agrarian Origins of American Capitalism. Charlottesville: University Press of Virginia, 1985.
- Lawrence, Dwight F., and Julius M. Palmer. "John Frederick Jumbag and the New Britain Glassmanufactory." *Journal of Glass Studies* 18 (1976): 54-118.
- Lawrence, Stuart R. "Ranks, Rankism, and Economic Development: The New England Case." *Journal of Economic History* 46 (September 1986): 647-688.
- Lawrence, Stuart R. Industry, Landless Banks, Financial Connections, and Economic Development in Industrial New England. New York: Cambridge University Press, 1994.
- Leach, Aubrey C. "Economic Behavior in a Planting Society: The Eighteenth-Century Chesapeake." *Journal of Southern History* 23 (November 1987): 463-483.
- Leach, Aubrey C. "The Tobacco Staple and the Planter's Problems: Technology, Labor, and Crops." *Agricultural History* 43 (January 1969): 48-82.
- Leach, Bruce. Working People of Philadelphia, 1680-1850. Philadelphia: Temple University Press, 1980.
- Leyton, Edwin T. "The First Original." *American Heritage of Invention and Technology* 2 (Spring 1987): 58-66.
- Leyton, Edwin T. "James Rumsey: Pioneer Technologist." *East Virginia History* 48 (1988): 7-32.

- Leamon, James T. *The Best Foot North Country: A Geographical Study of Early Southeastern Pennsylvania*. New York: W. W. Norton, 1906 (originally published, 1933).
- Lewis, Jan. *The Pursuit of Happiness: Fugitive and Violence in Jefferson's Virginia*. Cambridge: Cambridge University Press, 1983.
- Litchfield, Douglas B. "The Potomac Company: A Shareholders in Financing an Early American Internal Improvement Project." *Business History Review* 54 (Winter 1984): 599-652.
- Litchfield, Douglas B. "Eighteenth-Century Plans to Channel the Potomac River: Technology, Expertise, and Labor in a Developing Nation." *Virginia Magazine of History and Biography* 90 (July 1983): 321-333.
- Locher, Rodney C. "The Influence of English Agriculture on American Agriculture, 1776-1840." *Agricultural History* 11 (January 1937): 3-13.
- Locher, Rodney C. "Arthur Young and American Agriculture." *Agricultural History* 33 (January 1959): 43-56.
- Loose, Winifred J. "The Foreign Trade of Virginia, 1700-1800." *William and Mary Quarterly*, 3rd Ser. 1 (April 1954): 161-178.
- Low, W.A. "The Farmer in Post-Revolutionary Virginia, 1780-1790." *Agricultural History* 25 (April 1951): 129-139.
- Low, W.A. "Manufacturing and Planter Exclusion in Post-Revolutionary Virginia, 1790-1799." *Virginia Magazine of History and Biography* 61 (July 1955): 308-313.
- MacKenzie, Theodore B. *Early Towns in the Great West: The Struggle for Frequent Communication in the American Midwest, 1680-1820*. Cambridge: Cambridge University Press, 1980.
- Mann, Jackson T. "Slavery and Politics in Virginia, 1761-1781." *William and Mary Quarterly*, 3rd Ser. 32 (January 1975): 96-113.
- Martens, Howard B. "Count Luigi Castiglioni: An Early Italian Traveler to Virginia 1710-1719." *Virginia Magazine of History and Biography* 58 (October 1952): 473-481.
- Morris, Edward T. *Thomas Jefferson: Revolution*. New York: Harvey Schuman, 1962.

- Milner, Cathy D. "Capitalizing Hope: Economic Thought and the Early National Economy." *Journal of the Early Republic* 18 (Summer 1998): 373-391.
- McColley Robert. *Slavery and Jeffersonian Virginia*. Second Edition. Urbana: University of Illinois Press, 1974, originally published 1964.
- McCoy, Drew. *The Slavery Revolution: Political Economy in Jeffersonian America*. New York: W.W. Norton, 1998.
- McCurry, John J. *Money and Exchange in Europe and America, 1600-1750*. A Handbook. Chapel Hill: University of North Carolina Press, 1990.
- McCurry, John J. *How Much is That in Real Money? A Historical Price Index for Use as a Deflator of Money Values in the Economy of the United States*. Worcester: American Antiquarian Society, 1992.
- McCurry, John J., and Russell R. Menard. *The Economy of British North America, 1602-1789*. Chapel Hill: University of North Carolina Press, 1993.
- McGow, Joseph A. *Early American Technology: Making and Doing Things from the Colonial Era to 1820*. Chapel Hill: University of North Carolina Press, 1994.
- McGuire, William Jackson. "The Washington Society of Alexandria." *Early's Quarterly Historical and Genealogical Magazine* 7 (January 1969): 147-152.
- Merrell, Henry Roy. *Colonial North Carolina in the Eighteenth Century: A Study in Regional Development*. Chapel Hill: University of North Carolina Press, 1964.
- Merrell, Henry Roy. "Historical Geography and Early American History." *William and Mary Quarterly*. 3rd Ser. 33 (October 1976): 525-547.
- Merrell, Michael. "Putting Capitalism in Its Place: A Review of Recent Literature." *William and Mary Quarterly*. 3rd Ser. 52 (April 1995): 315-328.
- Miller, Robert Seligson. *City and Suburbia: A Case Study of Urban Growth and Regional Development*. Westport, CT: Greenwood Press, 1979.

- Miller, T. Michael. "Charles Lee: Collector of Customs: Portrait of an Early Alexandrian on the Waterfront." In *The Alexandria Waterfront Forum: Back and Forth, 1793-1862*. Alexandria, VA: Alexandria Urban Anthropology Program, 1993.
- Miller, T. Michael. *Artisans and Merchants of Alexandria, Virginia, 1790-1820*. 2 Volumes. Brown, 903. Heritage Books, 1991 and 1992.
- Moss, Thomas J. "How Machines Make History, and How Historians (and Others) Help Them to Do So." *Science, Technology, and Human Values* 13 (Winter and Spring 1994): 209-221.
- Maxwell, Laurence M. "The Centerville Community, 1790-1840." *Historical Society of Fairfax County, Virginia, Inc. Yearbook* 4 (1990): 16-48.
- Maxwell, Laurence M. "Old Mills on the Centerville Area." *Historical Society of Fairfax County, Virginia, Inc. Yearbook* 5 (1994-1995): 22-25.
- Michels, Robert D. "The Shenandoah Valley Frontier." *Annals of the Association of American Geographers* 62 (September 1972): 481-490.
- Michels, Robert D. "Agricultural Change and the American Revolution: A Virginia Case Study." *Agricultural History* 47 (April 1973): 115-128.
- Michels, Robert D. *Commercialism and Frontier Perspectives on the Early Shenandoah Valley*. Charlottesville: University Press of Virginia, 1977.
- Michels, Robert D. "The Formation of Early American Cultural Regions: An Interpretation." In *European Settlement and Development in North America: Essays on Transnational Change in Home and Memory of Andrew Hill Clark*. Ed. James E. Oliver. Toronto: University of Toronto Press, 1978.
- Michels, Robert D., ed. *Shenandoah Frontiers: Settlements, Society, and Development in the Piedmontal Area*. Lexington: University of Kentucky Press, 1991.
- Moynihan, Edmund S. *American Slavery/American Freedom: The Ordeal of Colonial Virginia*. New York: W.W. Norton, 1974.
- Morris, Richard B. *The Frontier of the Union, 1783-1789*. New York: Harper & Row, 1967.

- Marrison, A.J. "Virginia Pottery." *William and Mary Quarterly*, 2nd Ser. 2 (July 1935): 145-158.
- Morton, Frederic. *The Story of Winchester in Virginia, The Oldest Town in the Shenandoah Valley*. Front Royal, VA: Shenandoah Publishing House, 1985.
- Morton, Lewis. *Robert Carter of Nomos Hall, A Virginia Tobacco Planter of the Eighteenth Century*. Williamsburg, VA: Colonial Williamsburg, 1968.
- Muller, Edward E. "Selective Urban Growth in the Middle Ohio Valley, 1850-1940." *Geographical Society* 65 (April 1975): 178-198.
- Muller, Edward E. "Regional Urbanization and the Selective Growth of Towns in North American Regions." *Journal of Historical Geography* 3 (January 1977): 31-59.
- Mullin, David W. *Flight and Rebellion, Slave Resistance in Eighteenth-Century Virginia*. New York: Oxford University Press, 1972.
- Myrdal, Gunnar. *Rich Lands and Poor, The Road to World Prosperity*. New York: Harper & Brothers, 1967.
- Nelson, John R. "Alexander Hamilton and American Manufacturing: A Re-examination." *Journal of American History* 65 (March 1978): 871-905.
- Nelson, John R. *Liberty and Power in Political Economy and Policymaking in the New Nation, 1789-1828*. Baltimore: Johns Hopkins University Press, 1987.
- Netherland, Mrs. Donald Strong. *James Armand, Fairfax County, Virginia, A History*. Fairfax, VA: Fairfax County Board of Supervisors, 1978.
- Netherland, Ross B. *Colony Mill Run*. Fairfax, VA: Fairfax County Office of Comprehensive Planning, 1976.
- North, Douglas C. "Location Theory and Regional Economic Growth." *The Journal of Political Economy* 65 (June 1957): 943-958.
- North, Douglas C. *Growth and Welfare in the American Past*. Second Edition. Englewood Cliffs, NJ: Prentice Hall, 1954.

- Oakes, James. *The Rising Race: A History of American Slavery*. New York: Vintage Books, 1982.
- Oakes, James. *Slavery and Freedom: A History of the Old South*. New York: Alfred A. Knopf, 1982.
- Olsen, Alexander, and Barbara C. Stepien, eds. *The Pursuit of Knowledge in the Early American Republic: Anonymous Readings and Learned Societies from Colonial Times to the Civil War*. Baltimore: Johns Hopkins University Press, 1997.
- Olson, Alan L. "Government Commitments and New York City Mutual Savings Bank Financing of Antebellum Development." *Journal of Economic History* 32 (December 1972): 811-842.
- Olson, Alan L. "New York City Mutual Savings Bank Portfolio Management and Trustee Objectives." *Journal of Economic History* 34 (December 1974): 815-404.
- Palmer, Robert A. "Fictions in the Theory of Slavery and Slave Society." *Slavery and Society* 48 (Spring 1976): 1-27.
- Pangle, Thomas L. *The Spirit of Modern Republicanism: The Moral Vision of the American Founders and the Philosophy of Locke*. Chicago: University of Chicago Press, 1988.
- Papadimitriou, Edward C. "Planter Behavior and Economic Opportunity in a Staple Economy." *Agricultural History* 46 (April 1972): 297-341.
- Parrish, Peter J. *Slavery, History and Historians*. New York: Harper & Row, 1969.
- Peterson, William, and Conrad Edick Wright, eds. *New York and the Rise of American Capitalism: Economic Development and the Social and Political History of an American South, 1780-1830*. New York: New York Historical Society, 1980.
- Perkins, Edwin J. *American Public Finance and Financial Services, 1780-1845*. Columbia: Ohio State University, 1988.
- Peterson, Arthur G. "Commerce of Virginia, 1785-1791." *William and Mary Quarterly* 2nd Ser. 15 (October 1958): 368-90.

- Freeman, Arthur G. "The Alexandria Market Place in the Civil War." *William and Mary Quarterly* 2nd Ser. 12 (April 1955): 104-114.
- Freeman, Arthur G. "Flour and Grain Milling in Virginia: A Brief History." *Virginia Magazine of History and Biography* 43 (April 1937): 171-188.
- Fisher, Edward W. "Slavery in Mecklenburg, Burke County, North Carolina." *Journal of Southern History* 28 (May 1962): 177-195.
- Fitchell, John. *A New Chapter in the Early Life of George Washington, in Connection with the Narrative History of the Potomac Company*. New York: Hart Franklin, 1876, originally published New York: 1858.
- Frank, J.G.A. *The Merchants' Sons: Maritime, Political, Theoretical, and the Atlantic Republic*. Cambridge: Princeton: Princeton University Press, 1978.
- Frank, J.G.A., ed. *Three British Revolutions*. Princeton: Princeton University Press, 1963.
- Farber, Albert. *Copies, County Government in Virginia: A Legislative History, 1803-1893*. New York: Columbia University Press, 1947.
- Frazier, Frank D. "Proceeds for the Patent Act of 1790." *Journal of the Patent Office Society* 36 (March 1954): 167-167.
- Frazier, Frank D. "An Early Seventeenth Piece of John Fitch." *Pennsylvania Magazine of History and Biography* 75 (January 1951): 81-90.
- Frazier, Frank D. "The Steamboat Patent Before the Founding Fathers." *Journal of the Patent Office Society* 27 (July 1985): 498-522.
- Frazier, Frank D. "The Steam Boat Interference, 1783-1793." *Journal of the Patent Office Society* 40 (September 1958): 611-643.
- Frazier, Frank D. "Historic Background and Foundation of American Patent Law." *American Journal of Legal History* 5 (October 1961): 305-325.
- Freeman, Thomas M. "Alexandria and the Evolution of the Northern Virginia Economy, 1780-1776." *Virginia Magazine of History and Biography* 63 (July 1944): 283-304.
- Friedson, Daniel. "The Administrations and Beliefs of the U.S. Patent Office, 1790-1900." *Journal of the Early Republic* 5 (Fall 1965): 350-365.

- Price, Jacob. *France and the Chesapeake: A History of the French Tobacco Monopoly, 1674-1711, and Its Aftermath in the British and American Tobacco Trades*. 2 Volumes. Ann Arbor: University of Michigan Press, 1978.
- Parcell, Carroll W. "Thomas Daguer and William Peirce: An Example of the Transfer of Technology." *Ballou and Mary Spearsholtz*. Vol. Six. 23 October 1976. 101-102.
- Parcell, Carroll W. "Concepts in Science and Technology in Agriculture." *Agricultural History* 48 (January 1975): 93-94.
- Parcell, Carroll W. ed. *Technology in America: A History of Individuals and Ideas*. Cambridge, MA: MIT Press, 1961.
- Parcell, Carroll W. *The Machine in America: A Social History of Technology*. Baltimore: Johns Hopkins University Press, 1990.
- Quincy, Jos. M.G., ed. *The Craftsman in Early America*. New York: W.W. Norton, 1964.
- Rusholtz, John C. "The Absence of Towns in Seventeenth-Century Virginia." *Journal of Southern History* 30 (August 1966): 143-160.
- Rowland, John J. *Edmund Randolph: A Biography*. New York: MacMillan Publishing Company, 1974.
- Rund, John Philip. *The Concept of Liberty in the Age of the American Revolution*. Chicago: University of Chicago Press, 1966.
- Rayford, Norman K. "The Virginia Federalists." *Journal of Southern History* 23 (November 1957): 486-517.
- Rayford, Norman K. *Chesapeake Politics, 1781-1800*. New York: Columbia University Press, 1974.
- Rayford, Norman K. and Gordon Rheafer. "The Evolution of Political Parties in Virginia, 1783-1800." *Journal of American History* 68 (March 1974): 364-386.
- Roberts, Caroline. *The Eighteenth-Century Commonwealthman: Studies in the Transatlantic Development and Circumstances of English Liberal Thought from the Revolution of Charles II until the Flight with the Earl of Bolingbroke*. Cambridge, MA: Harvard University Press, 1997.

- Rockoff, Hugh T. "Variations of Banking and Regional Economic Development in the United States, 1840-1900." *Journal of Economic History* 35 (March 1975): 140-183.
- Rodgers, Daniel T. "Republicanism: The Current of a Concept." *Journal of American History* 79 (June 1985): 11-38.
- Ross, Leslie A. *Problems in Democracy: The Politics of the South, 1776-1850*. Lexington: University of Kentucky Press, 1968.
- Rossiter, Clinton. *Sovereignty of the People: The Origin of the American Tradition of Political Liberty*. New York: Harcourt Brace, 1955.
- Rothberg, Winifred B. "The Rural Frontiers." *Reviews in American History* 13 (December 1985): 628-631.
- Rothman, Martin. "Antislavery, Slaves and Cotton Exports: A Contextual in Marketing Organization and Economic Development." *Agricultural History* 68 (April 1995): 91-109.
- Rothman, Kate Mason. *The Life of George Mason, 1721-1792*. 3 Volumes. New York: G. P. Putnam's Sons, 1941.
- Royall, William L. *A History of Virginia Banks and Banking From to the Civil War, With an Essay on the Banking System Needed*. New York: Knickerbocker Publishing Company, 1907.
- Royce, Charles. *Light House Harry Lee and the Legacy of the American Revolution*. New York: Alfred A. Knopf, 1961.
- Rubin, Julius. "The Limits of Agricultural Progress in the Nineteenth Century South." *Agricultural History* 45 (April 1971): 163-173.
- Rutman, Dorett B., ed. *The Old Dominion, Essays for Thomas Perkins Abernethy*. Charlottesville: University Press of Virginia, 1964.
- Rutman, Dorett B., and Anita H. Rutman. *A Place on Time: Middlesex County, Virginia, 1650-1750*. New York: W. W. Norton, 1966.
- Rutman, Dorett B., and Anita H. Rutman. *Small World, Large Questions, Explorations in Early American Social History, 1600-1800*. Charlottesville: University Press of Virginia, 1964.

- Russell, Mary Elizabeth. Banknotes, Currency, Capitalism: The Formation of American Money, Insurance Companies. New York: Garland Publishing, 1997.
- Sawyer, Walter S. The Great National Project: A History of the Chesapeake and Ohio Company. Baltimore: Johns Hopkins University Press, 1946.
- Schweikart, Larry. "Banking in the American South, 1838-1845." Journal of Economic History 45 (June 1985): 495-527.
- Schweikart, Larry. Banking in the American South from the Age of Jackson to Reconstruction. Baton Rouge: Louisiana State University Press, 1987.
- Schweikart, Larry. "Jacksonian Ideology, Currency Control and Central Banking: A Reappraisal." The Historian 53 (November 1989): 75-102.
- Schweikart, Mary M. "State-Issued Currency and the Realization of the U.S. Constitution." Journal of Economic History 45 (June 1985): 511-525.
- Scott, Anna Fenn. The Southern Lady: From Pedestal to Politics, 1830-1890. Chicago: University of Chicago Press, 1996.
- Seelye, John. Benjamin Franklin, Sykes and the Republican Plan, 1776-1820. New York: Oxford University Press, 1991.
- Shalhope, Robert E. "Toward a Republican Synthesis: The Emergence of an Understanding of Republicanism in American Historiography." William and Mary Quarterly, 3rd Ser. 39 (January 1978): 49-80.
- Shalhope, Robert E. John Taylor of Caroline: Political Republicanism. Columbia: University of South Carolina Press, 1988.
- Shalhope, Robert E. "Republicanism and Early American Historiography." William and Mary Quarterly, 3rd Ser. 35 (April 1978): 334-354.
- Shalhope, Robert E. The Roots of Democracy: American Thought and Culture, 1763-1818. Boston: Twayne Publishers, 1980.
- Shaw, Russell E. "Credit in the Early Republic: A Review of Recent Literature." Journal of the Early Republic 4 (Summer 1984): 137-142.

- Shaw, Ronald E. *Canals for a Nation: The Canal Era in the United States, 1793-1890*. Lexington: University Press of Kentucky, 1990.
- Shepherd, James F. "Commodity Exports from the British North American Colonies to Overseas Areas, 1749-1773: Magnitudes and Patterns of Trade." *Explorations in Economic History* 4 (Fall 1970): 5-76.
- Siegel, Fred. "Parameters for Paternalism." *Racial History Review* 1 (1976): 60-67.
- Siegel, Fred. "The Paternalist Thesis: Virginia as a Test Case." *Civil War History* 26 (September 1979): 248-261.
- Siegel, Fred. "The Virginia Ideology." *Reviews in American History* 7 (September 1979): 344-349.
- Siegel, Frederick F. *The Roots of Southern Disenfranchisement: Tobacco and Society in Dinwiddie, Virginia, 1794-1860*. Chapel Hill: University of North Carolina Press, 1987.
- Simon, William H. "Charles Yancey, the Ocean Trade, and Economic Development in Fredericksburg, Virginia, 1790-1830." *Virginia Magazine of History and Biography* 95 (October 1995): 460-496.
- Slagge, David Curtis. "John Sample and the Development of the Potomac Valley, 1790-1773." *Virginia Magazine of History and Biography* 90 (July 1984): 282-308.
- Slaughter, Thomas P. *The Chesapeake Rebellion: Frontier Violence in the American Revolution*. New York: Oxford University Press, 1996.
- Sawley, Aubrey. *Race in North America: Origins and Evolution of a World View*. Boulder: Westview Press, 1999.
- Smith, Eugene B. *Centerville, Virginia: Its History and Architectural Features*. VA: Fairfax County Board of Supervisors, 1972.
- Smith, Morris R. *Harper's Ferry: Armory and the New Technology: The Challenge of Change*. Ithaca: Cornell University Press, 1977.
- Smith, William Francis, and T. Michael Miller. *A Support Regt. Portrait of Old Alexandria, Virginia*. Norfolk, VA: Seawing Company, 1989.

- Smolensky, Eugene, and Donald Rutzarski. "The Conception of Cities." *Explorations in Entrepreneurial History* 3 (Winter 1968): 90-101.
- Solow, J.H. "Scottish Traders in Virginia, 1700-1715." *Economic History Review*, 2nd Ser. 12 (August 1969): 61-68.
- Sprague, Edith Moore. *Goldwater, Colonel, Port on the Potomac*. Fairfax, VA: Fairfax Office of Comprehensive Planning, 1972.
- Stamps, Kenneth M. *The Peculiar Institution: Slavery in the Ante-Bellum South*. New York: Vintage Books, 1964, originally published, 1959.
- Stearns, William G. "Party Violence, 1790-1800." *Virginia Magazine of History and Biography* 30 (April 1924): 375-378.
- Stephens, Darwin H. *The Transfer of Early Industrial Technologies to America*. Philadelphia: American Philosophical Society, 1987.
- Stewart, George T. *Sixty Years of Branch Banking in Virginia*. New York: MacMillan Company, 1921.
- Stulenbaum, John M. "Recent Trends in the History of Technology." *American Historical Review* 65 (June 1969): 711-725.
- Swales, Charles G. *The Mechanics of Baltimore: Workers and Politics in the Age of Revolution, 1760-1812*. Urbana: University of Illinois Press, 1984.
- Swann, Charles W. *Washington and His Neighbors*. Baltimore: Garrett and Manes, 1958.
- Swann, Harry E. "Bank Entrepreneurs in a Western Town, 1805-1820." *Business History Review* 29 (June 1955): 180-186.
- Swanson, Brenda E. *Left in Black and White: Family and Community in the Slave South*. New York: Oxford University Press, 1986.
- Swick, Berk J. *Yankee Settlers in the Making*. Boston: Little, Brown, and Company, 1948.
- Sving, Donald. "A Capital on the Potomac: A 1780 Broadside and Alexander's Attempts to Capture the Unrushed Press." *Virginia Magazine of History and Biography* 87 (January 1979): 74-104.

- Sylvan, Charles S. American Revolutionaries in the Making: Political Frictions in Washington's Virginia. New York: Free Press, 1980, originally published, 1962.
- Sylla, Richard, John S. Legler, and John J. Wallis. "Taxes and State Public Finance in the New Republic: The United States, 1789-1860." Journal of Economic History 47 (June 1987): 395-405.
- Tappert, Hugh H. "Old Georgetown." Records of the Columbia Historical Society 11 (1909): 120-224.
- Taylor, George Rogers. The Transportation Revolution, 1815-1860. New York: Knickerbocker & Company, 1940.
- Taylor, Robert L. "The History of the Potomac Bridge in the Washington Area." Architectural Historical Magazine 1 (October 1957): 45-49.
- Thomas, Peter. "Labor Scarcity in America." Journal of Interpersonal History 1 (Winter 1971): 353-364.
- Thomson, William D. "Fremont's Overbank and Keep State Finance." West Virginia History 48 (1993): 43-61.
- Tobias, Charles. "Exports and Regional Economic Growth." Journal of Political Economy 44 (April 1936): 348-359.
- Trip, Frederick. "The Maritime History of Alexandria From 1800." In The Alexandria Waterfront Forum, Birth and Rebirth, 1730s-1983. Alexandria, VA: Alexandria Urban Archaeology Program, 1983.
- Turner Bryan. Florida, Delaware, Chesapeake Canal And Locks, Historic Structures Report, Great Falls, Virginia. Washington: United States Department of the Interior, Division of History, Office of Archeology and Historic Preservation, 1979.
- Trim, Robert H. "John Bates of London." William and Mary Quarterly 3rd Ser. 3 (January 1946): 20-29.
- Turner, Charles W. "Virginia Agricultural Reform, 1810-1860." Agricultural History 36 (July 1962): 40-48.
- Turner, Charles W. "Virginia State Agricultural Societies, 1811-1860." Agricultural History 38 (July 1964): 147-173.

- Turner, Ella May. *James Rumsey, Pioneer in Steam Navigation*. Baltimore, PA: Independence Publishing House, 1900.
- Tyson, Martha E. "A Brief Account of the Settlement of Elbert's Mills, with Fragments of History therewith Connected." *Maryland Historical Society Fund Publication* 4 (1870): 1-47.
- Van Alstyne, Richard. *The Flying American Engine*. New York: W.W. Norton, 1960.
- Votaw, Barbara. "Industrial Borrowing by Go: New England Textile Mills, 1840-1860: A Comment." *Journal of Economic History* 21 (June 1961): 329-333.
- Vickers, Daniel. "Competency and Competitiveness: Economic Culture in Early America." *William and Mary Quarterly*, 3rd Ser. 47 (January 1990): 1-29.
- Wicks, John Joseph. *Early Banks in the District of Columbia, 1790-1815*. Washington: Catholic University Press of America, 1948.
- Ward, Harry W., and Harold E. Grier. *Richmond during the Revolution, 1775-1783*. Charlottesville: University Press of Virginia, 1977.
- Watts, Steven. *The Republic Before War and the Making of Labor's America, 1788-1820*. Baltimore: Johns Hopkins University Press, 1987.
- Wey, Peter. *Common Labour: Workers and the Shaping of North American Canada, 1793-1850*. Cambridge: Cambridge University Press, 1998.
- Williamson, Herman. "Urbanization in the Colonial South." *William and Mary Quarterly*, 3rd Ser. 21 (October 1964): 658-671.
- Wieder, Ross. *Slaves, Humanism, New York City and the Birth of the American Working Class, 1758-1850*. New York: Oxford University Press, 1984.
- Willson, Herman. *Legends of Loudoun: An Account of the History and Geographical, Political, County of Virginia's Northern Neck*. Richmond: Garrett and Massie, 1898.
- Witch, Donald. *Adam Smith's Politics: An Essay in Historical Analysis*. Berkeley: Cambridge: Cambridge University Press, 1979.

- Wach, Donald. "Economic Liberalism as Ideology: The Appleby Vision." *Economic History Review* 36 (May 1985): 267-287.
- Wat, William. *Sketches of the Life and Character of Patrick Henry*. Falmouth Maine: Hurdard Bliss Andrew and Son, 1942.
- Wood, Frederic J. *The Turbulence of New England, and the Evolution of the Same Through England, Virginia, and Maryland*. Boston: Marshall Jones Company, 1819.
- Wood, Gordon S. "Rhetoric and Reality in the American Revolution." *Edmund and Mary Stansfeld*. Vol. 80. 23 (January 1985): 1-33.
- Wood, Gordon S. *The Creation of the American Republic, 1776-1787*. New York: W.W. Norton, 1972, originally published, 1949.
- Wood, Gordon S. *The Revolution and the American Republic*. New York: Alfred A. Knopf, 1969.
- Wood, Gordon S. "The Essay on the Democratic Capitalism in the Early Republic." *Journal of the Early Republic* 18 (Summer 1994): 265-288.
- Woodward, Carl R. "A Dissertation of Arthur Young and American Agriculture." *Agricultural History* 45 (January 1969): 51-67.
- Wyatt, Tony P. *Falls Church: History of a Virginia Village*. Falls Church: Historical Commission of the City of Falls Church, 1972.
- Wyss, Bruce. *Reveries: Southern History, Culture, and Belonging in the Old South*. New York: Oxford University Press, 1993.
- Yock, Neil Loucky. *Mechanism, Metamorphosis, Technological Change in Revolutionary America*. Westport CT: Greenwood Press, 1985.
- Young, Alfred F., ed. *The American Revolution: Explorations in the History of American Radicalism*. DeKalb: University of Northern Illinois Press, 1966.
- Young, Alfred F., ed. *Beyond the American Revolution: Explorations in the History of American Radicalism*. DeKalb: University of Northern Illinois Press, 1965.
- Yukle, Conway. "To Plow or Not to Plow: Comment on the Plowman's Problem." *Agricultural History* 45 (January 1969): 67-68.

### **Essays, Reports, and Unpublished Material**

- Ames, Harry. "The Republican Party in Virginia, 1789-1834." Ph.D. Dissertation, University of Virginia, 1948.
- Bergsten, Peter V. "Merchants and Merchants: Economic Diversification in Colonial Virginia, 1700-1770." Ph.D. Dissertation, University of New Hampshire, 1980.
- Biss, Willard F. "The Tobacco in the Valley." Ph.D. Dissertation, Princeton University, 1948.
- Blumberg, Brenda. "Free Black Adaptive Responses to the Antebellum Urban Environment." Ph.D. Dissertation, American University, 1988.
- Bradford, James Chapin. "Gentry and Movement in Loudoun County Virginia, 1700-1800." Ph.D. Dissertation, University of Virginia, 1979.
- Camp, T. Allen. "Down and Flow in Eastern Virginia, 1680-1800." Ph.D. Dissertation, University of Delaware, 1975.
- Finner, Susan. "The Financial Structure and Banking Institutions of the Antebellum South, 1811-1832." Ph.D. Dissertation, University of Massachusetts, 1981.
- Fisher, Mary Catherine. "Artisans of the South: A Comparative Study of Norfolk, Charleston, and Alexandria, 1703-1800." Ph.D. Dissertation, College of William and Mary, 1992.
- Gunn, Ronald Eugene. "The Origins and Early Development of the Virginia Full-Low Tonnage." Master's Thesis, University of Maryland, 1971.
- Hill, Timothy J. "The Origins of West End and the Little River Parishes: Urbanization and Economic Change on Northern Virginia, 1702-1832." Master's Thesis, Washington State University, 1985.
- Holmes, William Raymond. "Three Pine Prospects: Frederick County, Virginia, 1700-1840." Ph.D. Dissertation, University of Virginia, 1980.
- Hughes, Sarah Sherry. "Hemlock County, Virginia, 1742-1810: The Economic and Social Structure of a Tidewater County in the Early National Years." Ph.D. Dissertation, College of William and Mary, 1979.

- Epstein, Col. Francis C. "On the Threshold of Greatness: Historic Alexandria, Virginia, 1784-1795." Unpublished Manuscript, Lloyd House, Alexandria, 1974.
- Kingsmen, David C. "Colonial Virginia's Overtime and Green Trade." Ph.D. Dissertation, University of Virginia, 1987.
- Miller, T. Michael. "An Analysis of Light House Henry Lee's Financial and Real Estate Transactions." Unpublished Manuscript, Lloyd House, Alexandria, 1992.
- Mason, James Donald. "From Empire to Commonwealth: Alexandria, Virginia, 1749-1790." Ph.D. Dissertation, University of Maryland, 1964.
- Olson, Christopher John. "Community, Honor, and Secession in the Deep South: Mississippi's Political Culture, 1840s-1861." Ph.D. Dissertation, University of Florida, 1988.
- Potter, Thomas Milton. "Eighteenth Century Alexandria, Virginia: before the Revolution, 1749-1795." Ph.D. Dissertation, College of William and Mary, 1977.
- Rae, Philip Morris. "Internal Improvements in Virginia, 1775-1860." Ph.D. Dissertation, University of North Carolina at Chapel Hill, 1948.
- Roberts, Edward Graham. "The Route of Virginia, 1800-1840." Ph.D. Dissertation, University of Virginia, 1959.
- Rofigah, Ray Martin. "An Analysis of the Rise, Decline and Possible Determinants of Redevelopment of the Seaport of Alexandria." MEd Thesis, City College of New York, 1961.
- Schlesinger, John Thomas. "Plantation and Farm: Social and Economic Change in Orange and Green Counties, Virginia, 1720-1880." Ph.D. Dissertation, Johns Hopkins University, 1960.
- Singaria, Donald G. "Maritime Alexandria: An Examination of Submerged Cultural Resource Potentials in Alexandria, Virginia." Unpublished Report Prepared for Alexandria Archeology Office of Historic Alexandria, Lloyd House, Alexandria, 1991.

Smith, Jo Anne. "Historical Background for the Designation of the Great Falls Canal and Locks of the Potomac Company as a National Historic Engineering Landmark." Unpublished Paper Presented at the National Meeting on Transportation Engineering, Washington, 1989.

Stewart, John, S.V.D. "The Port of Alexandria, Virginia, in the Eighteenth Century." Master's Thesis, Catholic University of America, 1990.

## BIOGRAPHICAL SKETCH

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy.

  
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy.

  
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy.

  
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This dissertation was submitted to the Graduate Faculty of the Department of History in the College of Liberal Arts and Sciences and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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